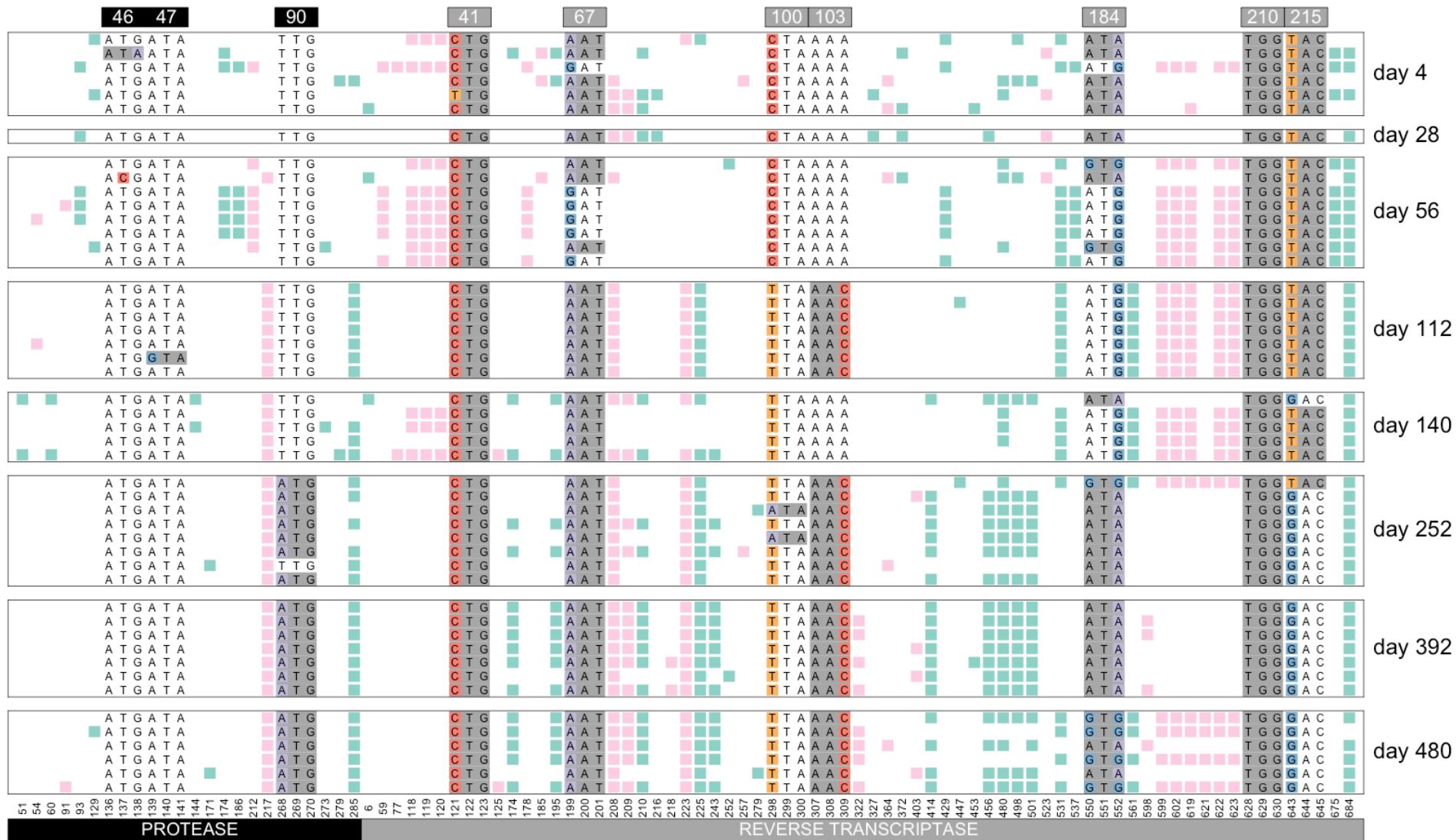


Viral sequences from patient 001

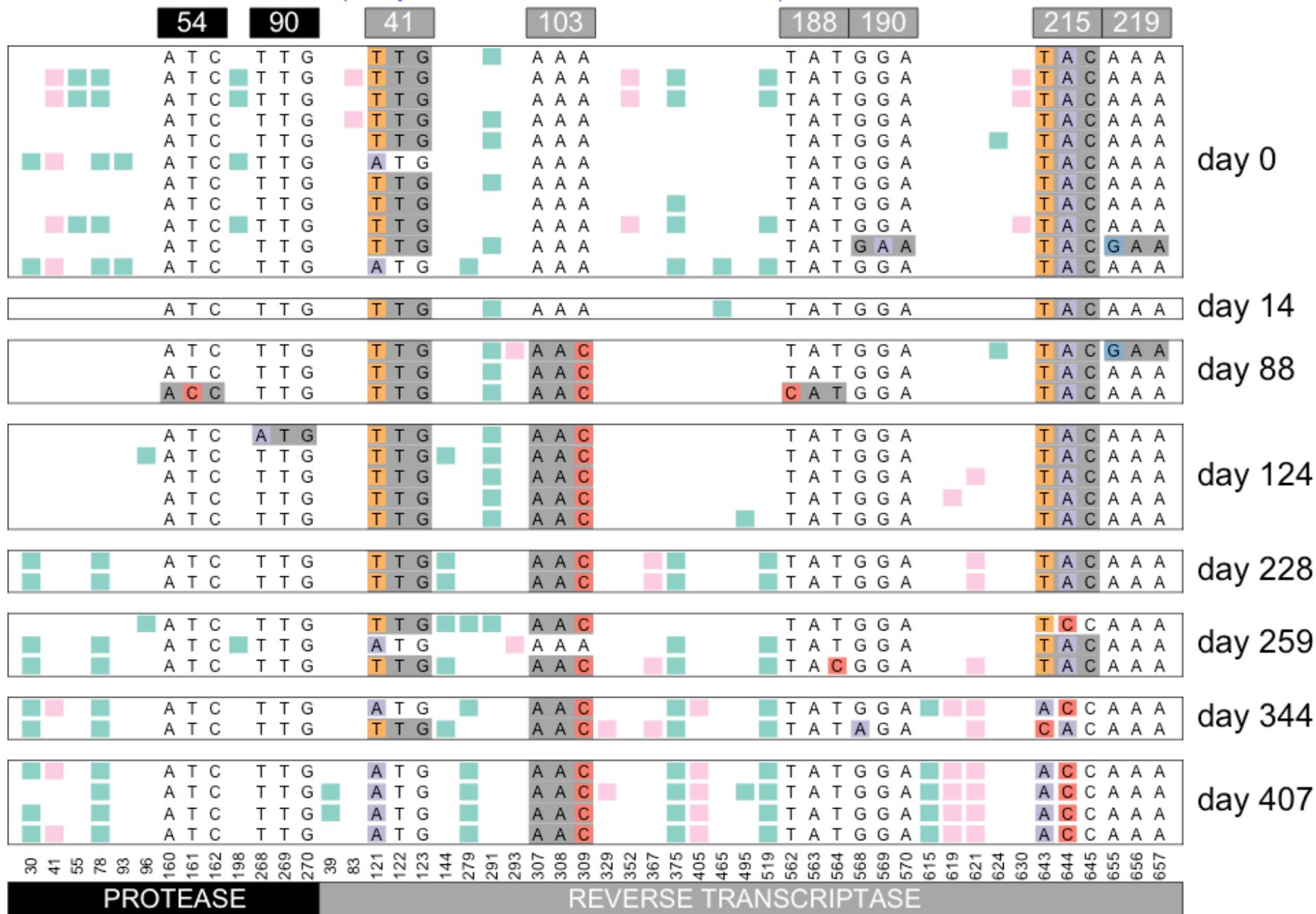
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

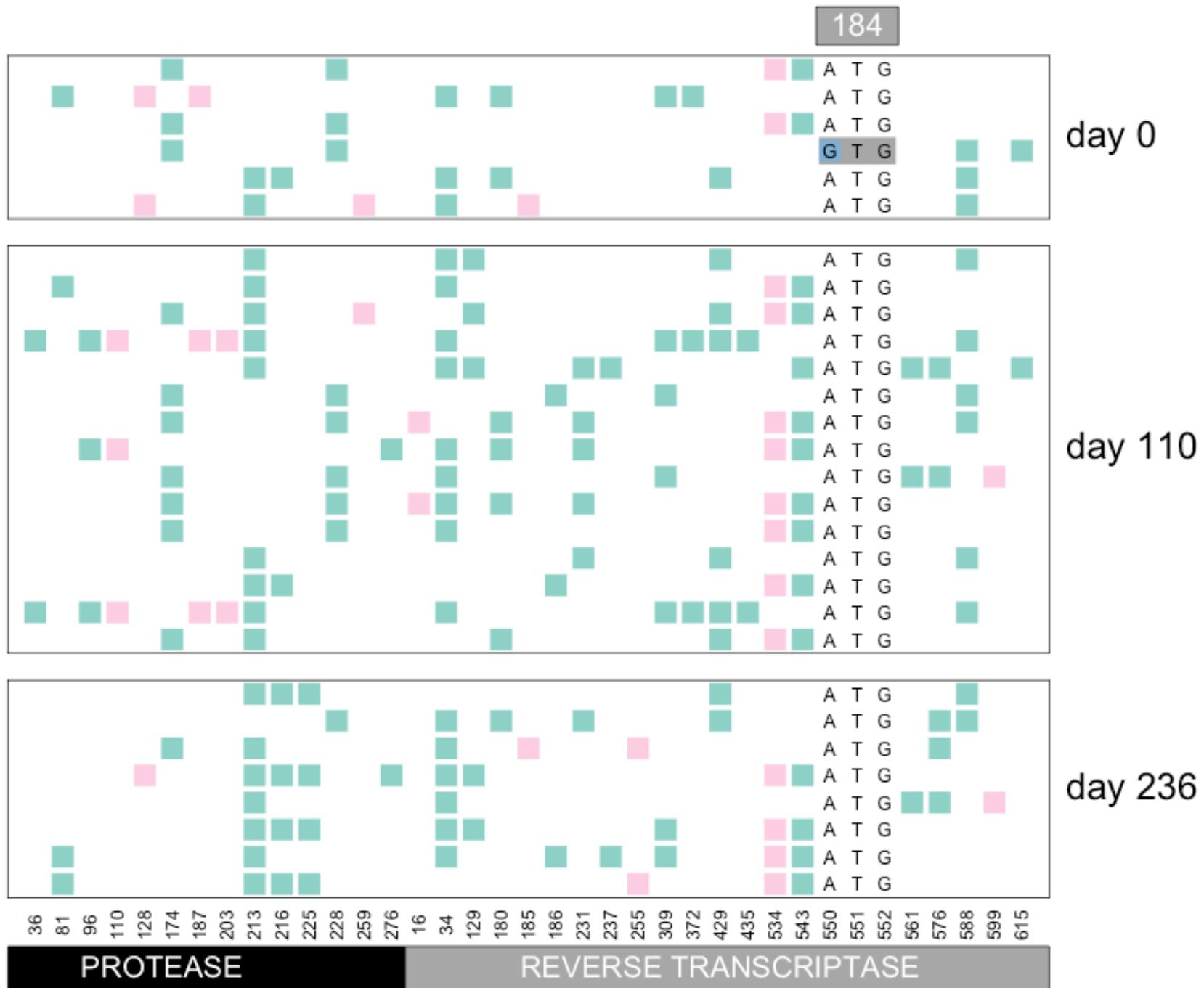
Viral sequences from patient 003

(likely treated with indinavir + efavirenz)



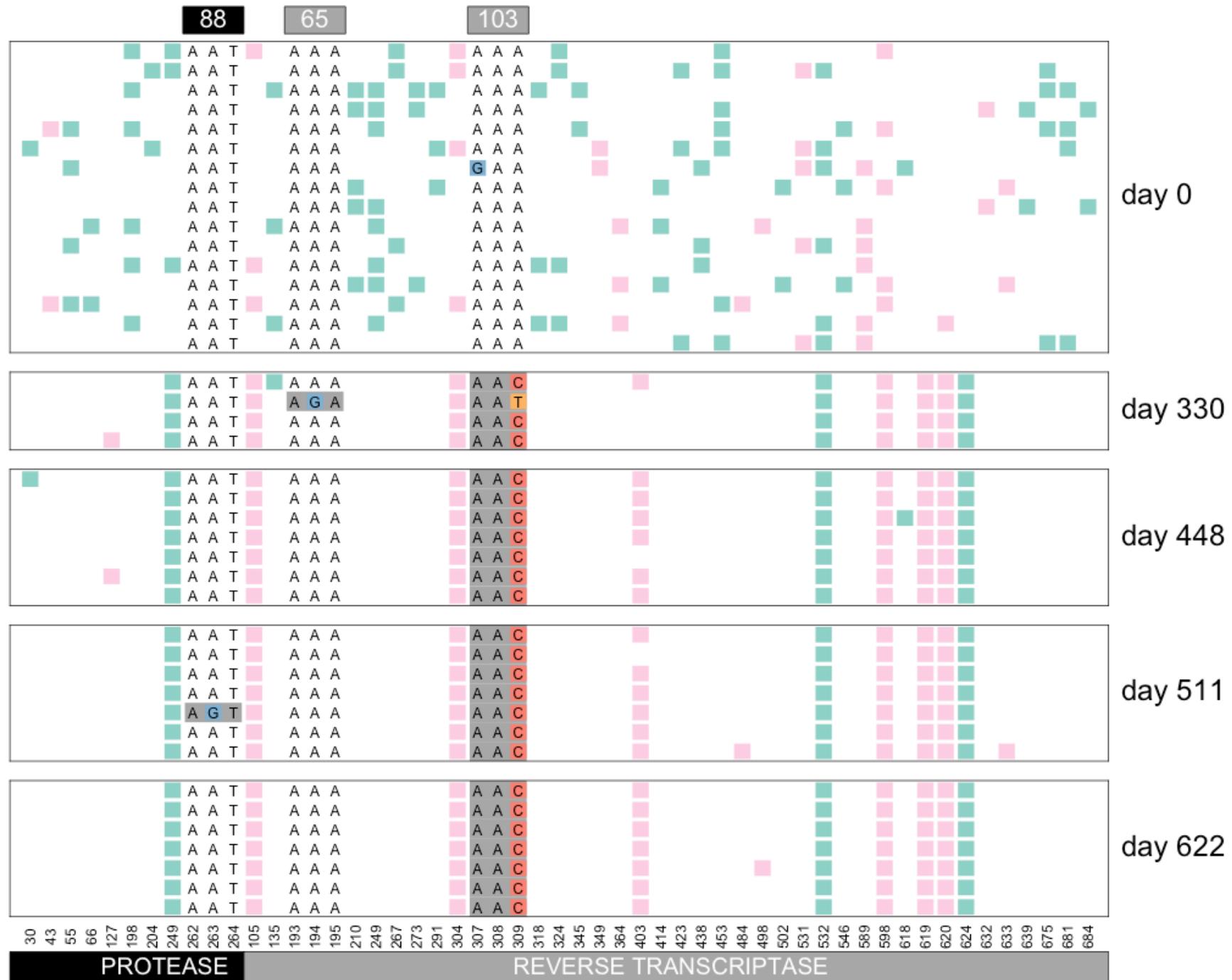
Viral sequences from patient 004

(likely treated with indinavir then later switched to efavirenz combination therapy)



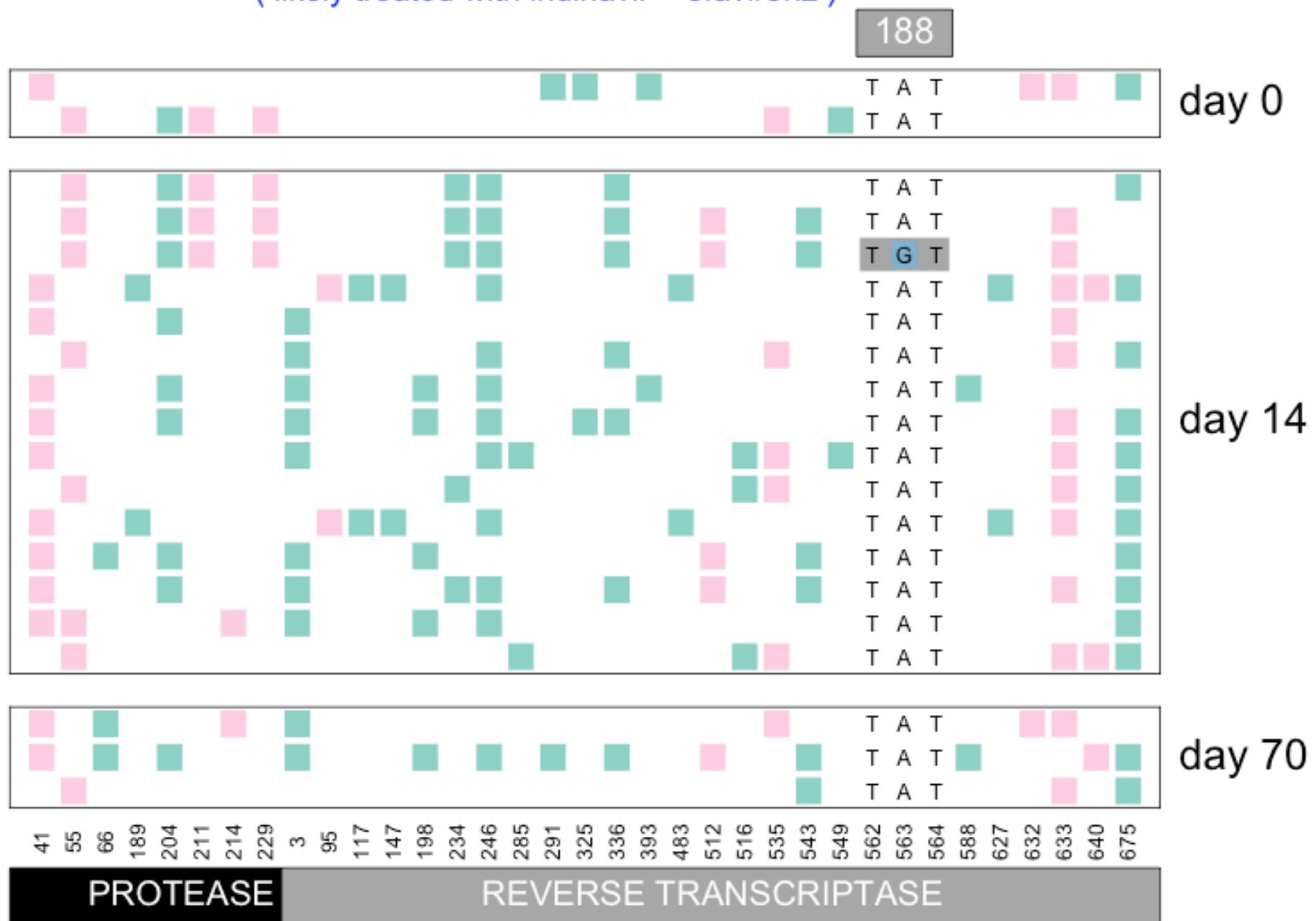
Viral sequences from patient 005

(likely treated with indinavir then later switched to efavirenz combination therapy)



Viral sequences from patient 006

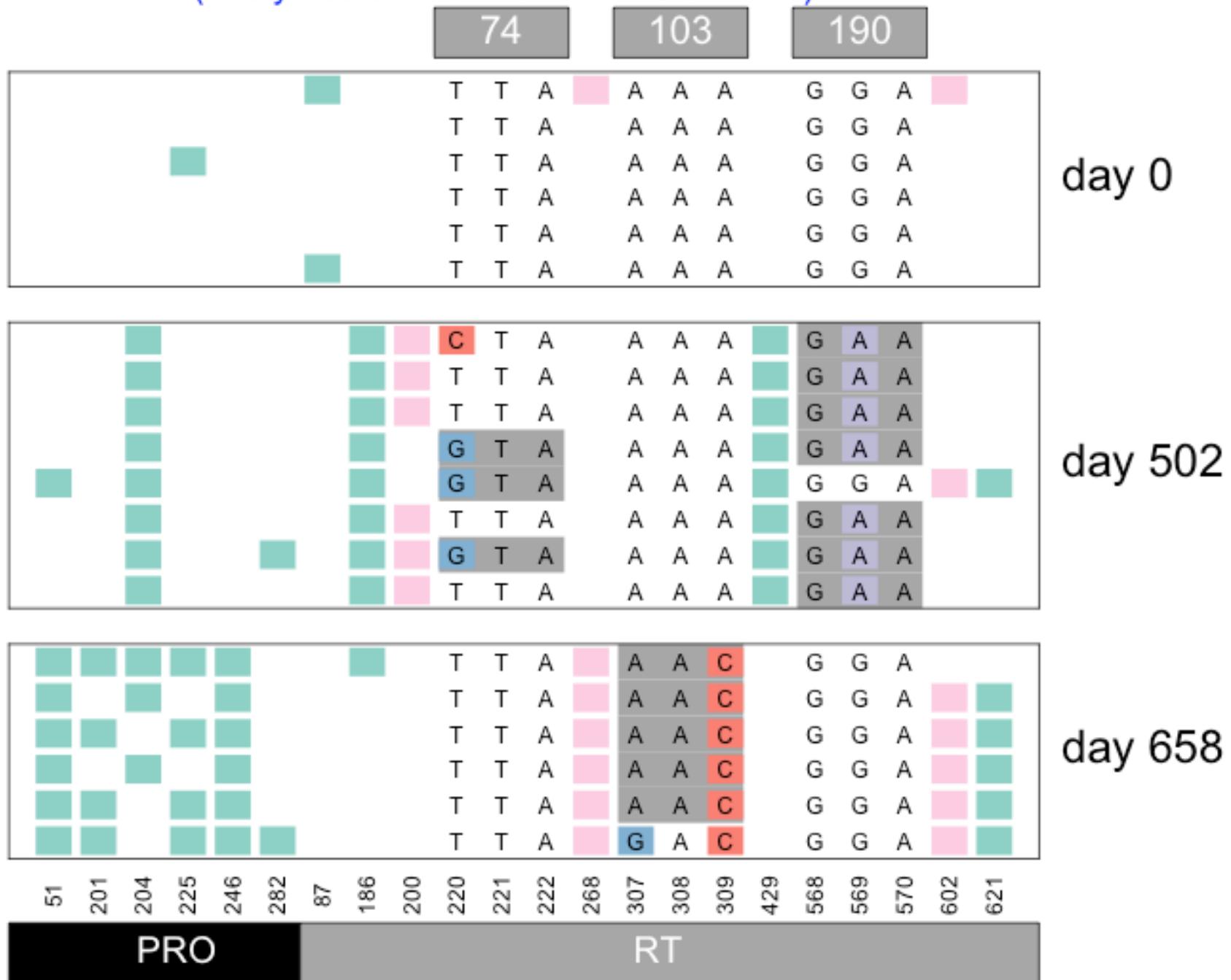
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

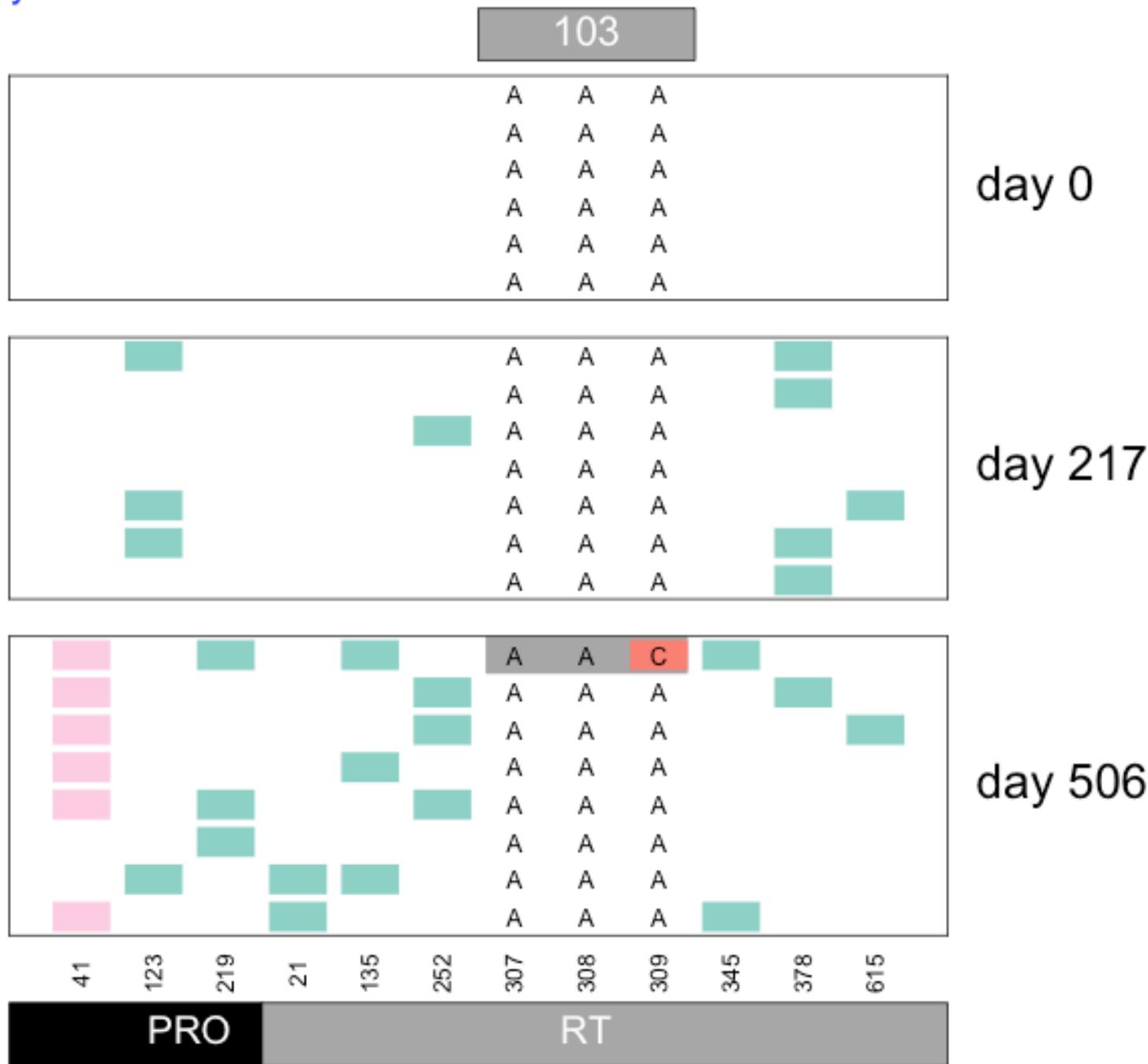
Viral sequences from patient 007

(likely treated with indinavir + efavirenz)



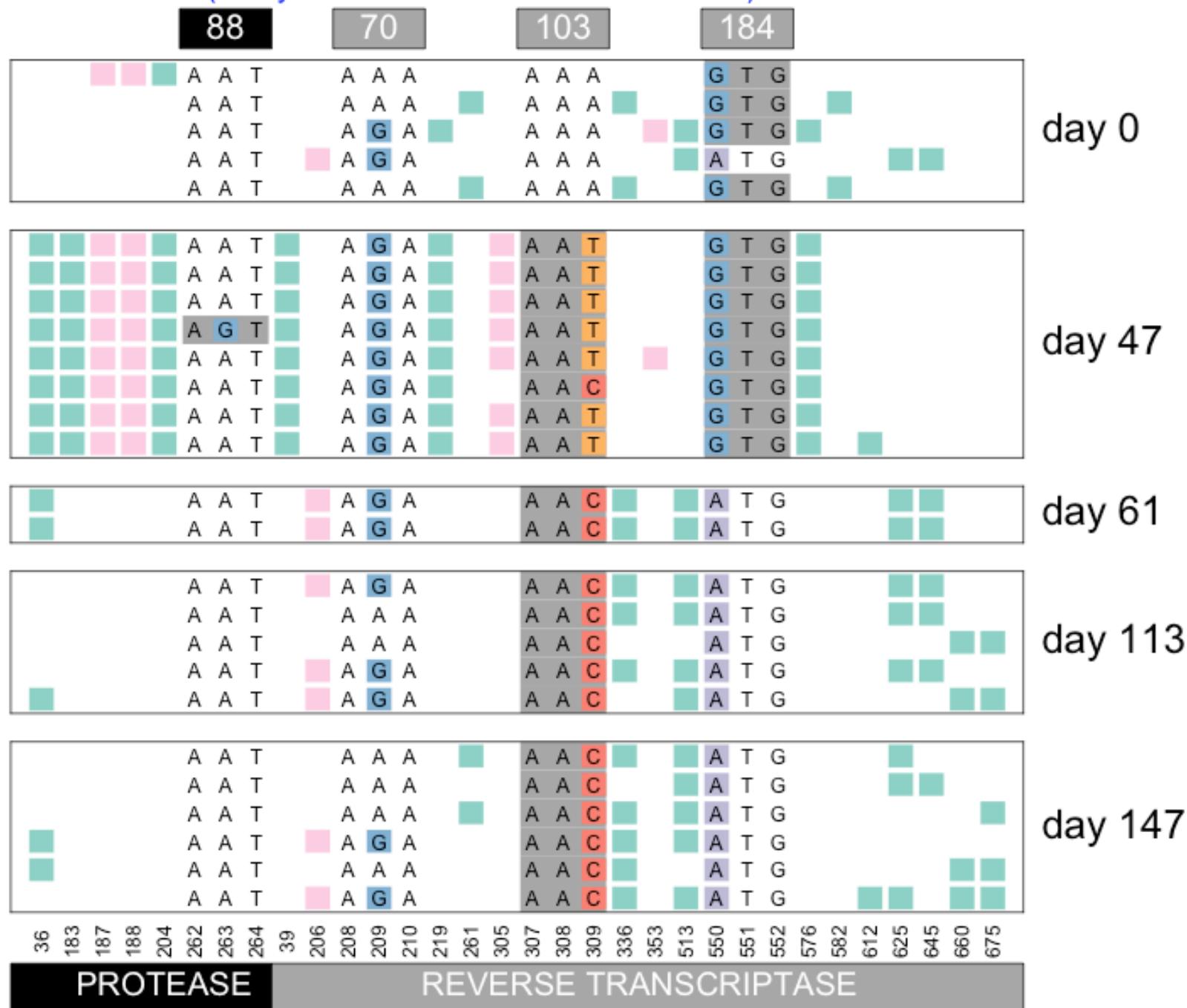
Viral sequences from patient 008

(likely treated with indinavir then later switched to efavirenz combination therapy)



Viral sequences from patient 011

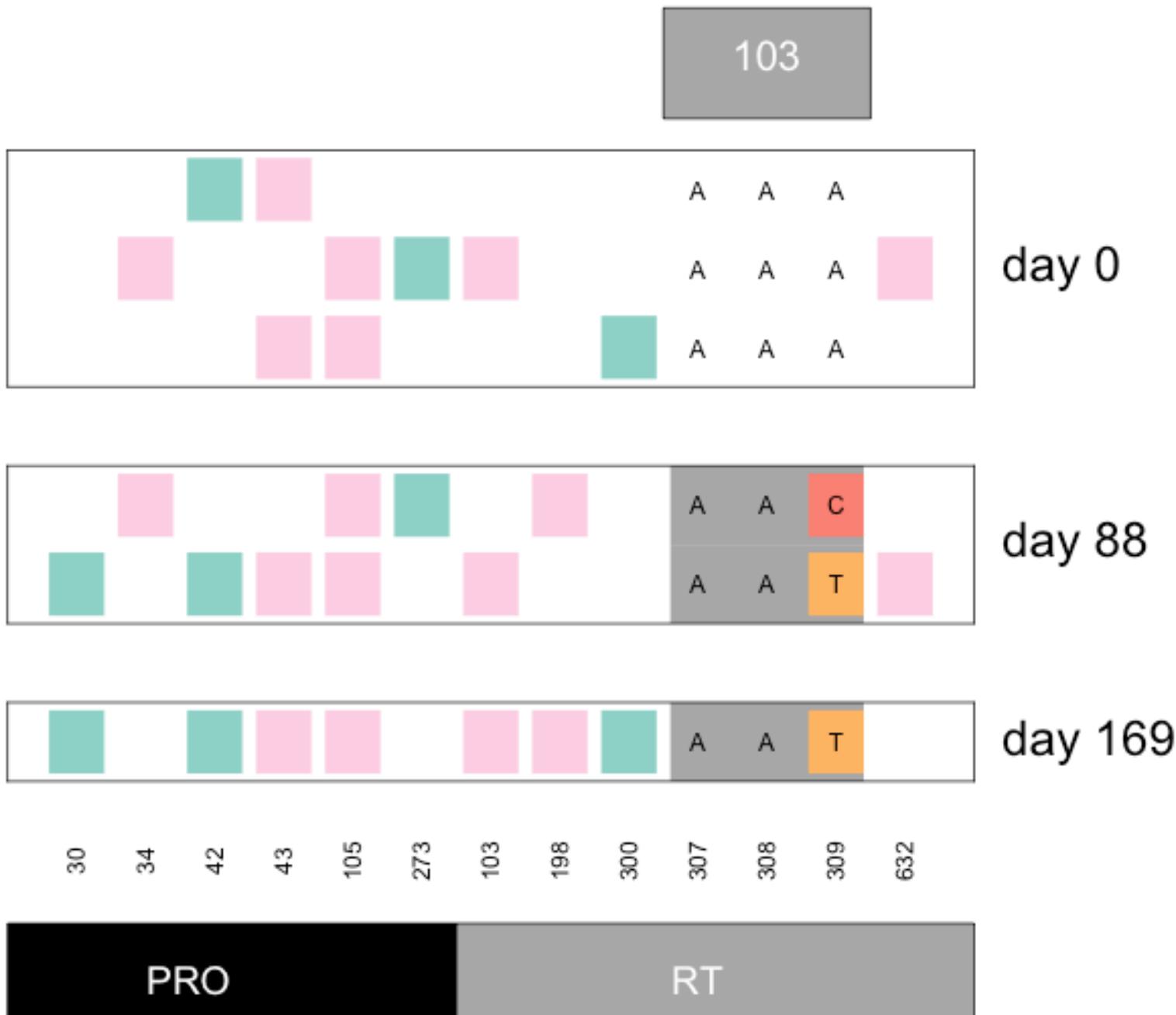
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

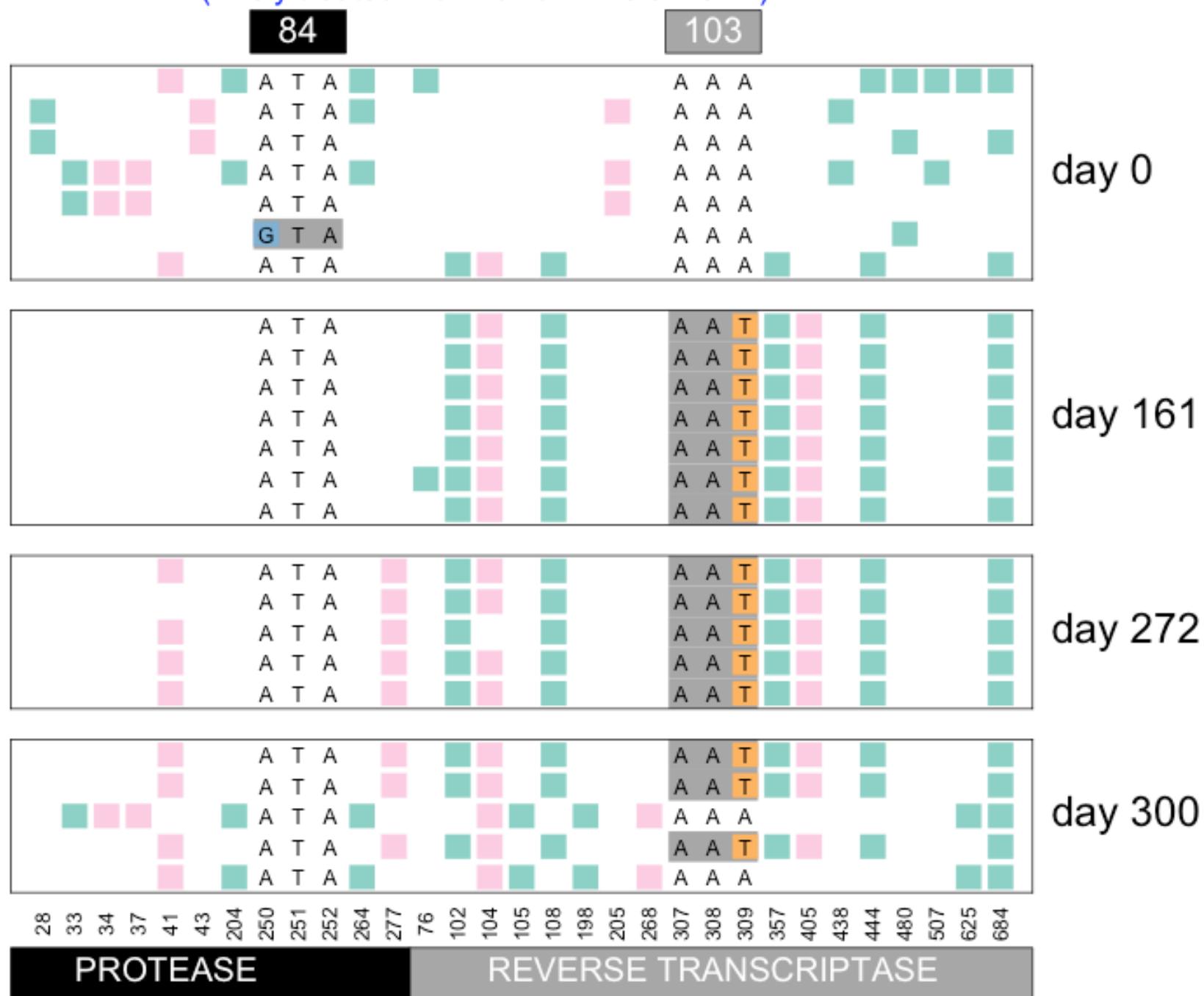
Viral sequences from patient 012

(likely treated with indinavir + efavirenz)



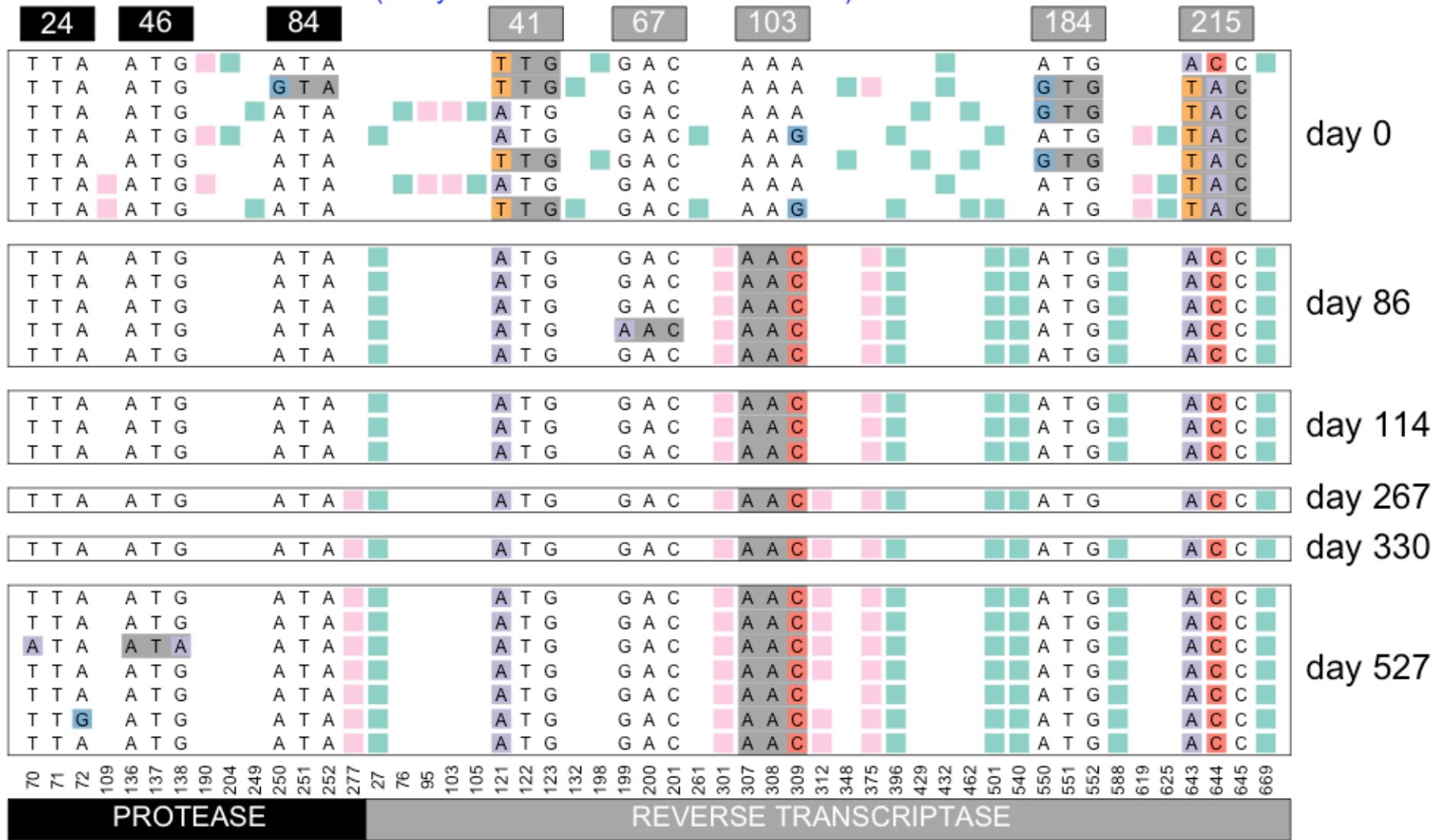
Viral sequences from patient 013

(likely treated with indinavir + efavirenz)



Viral sequences from patient 014

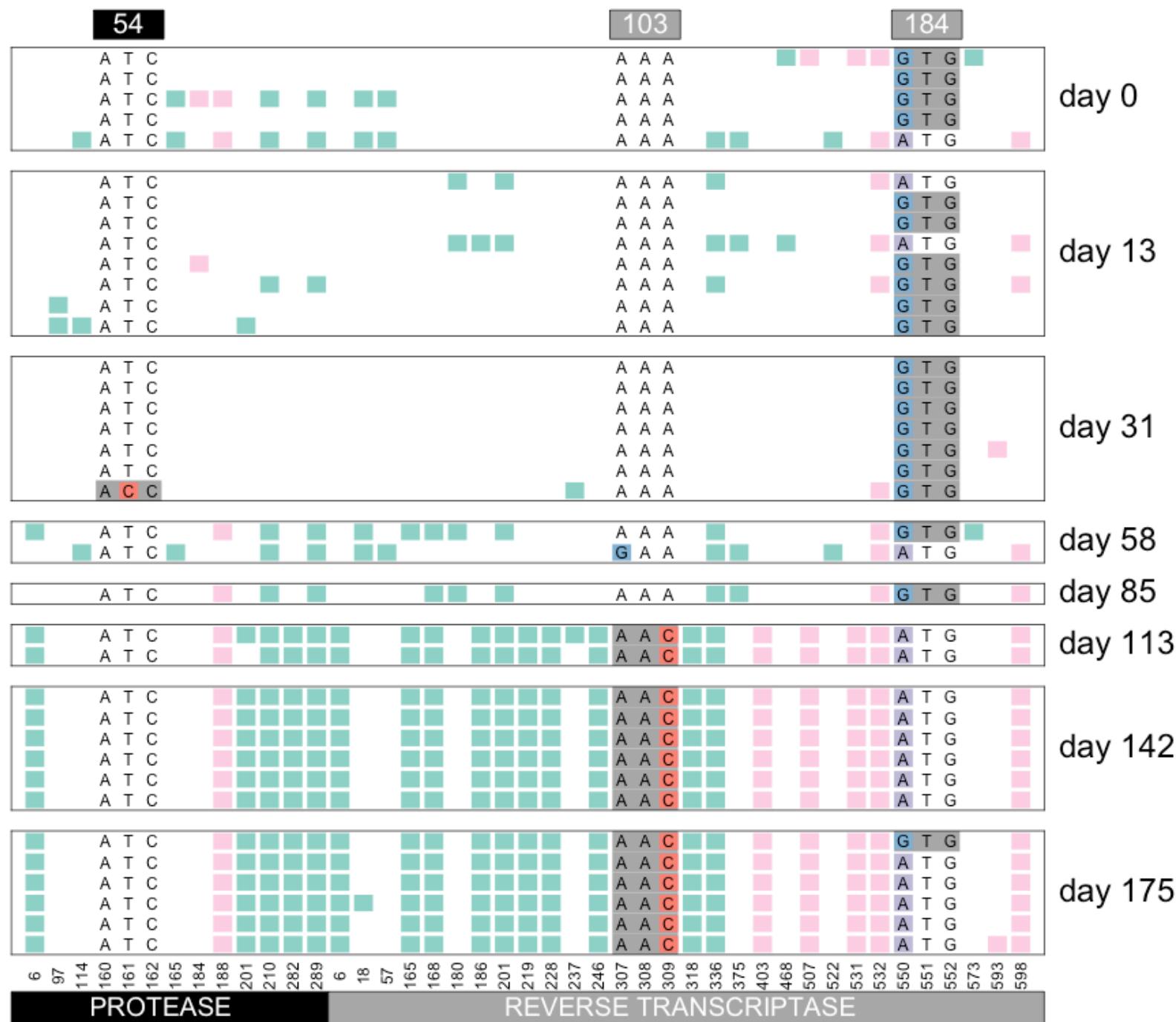
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

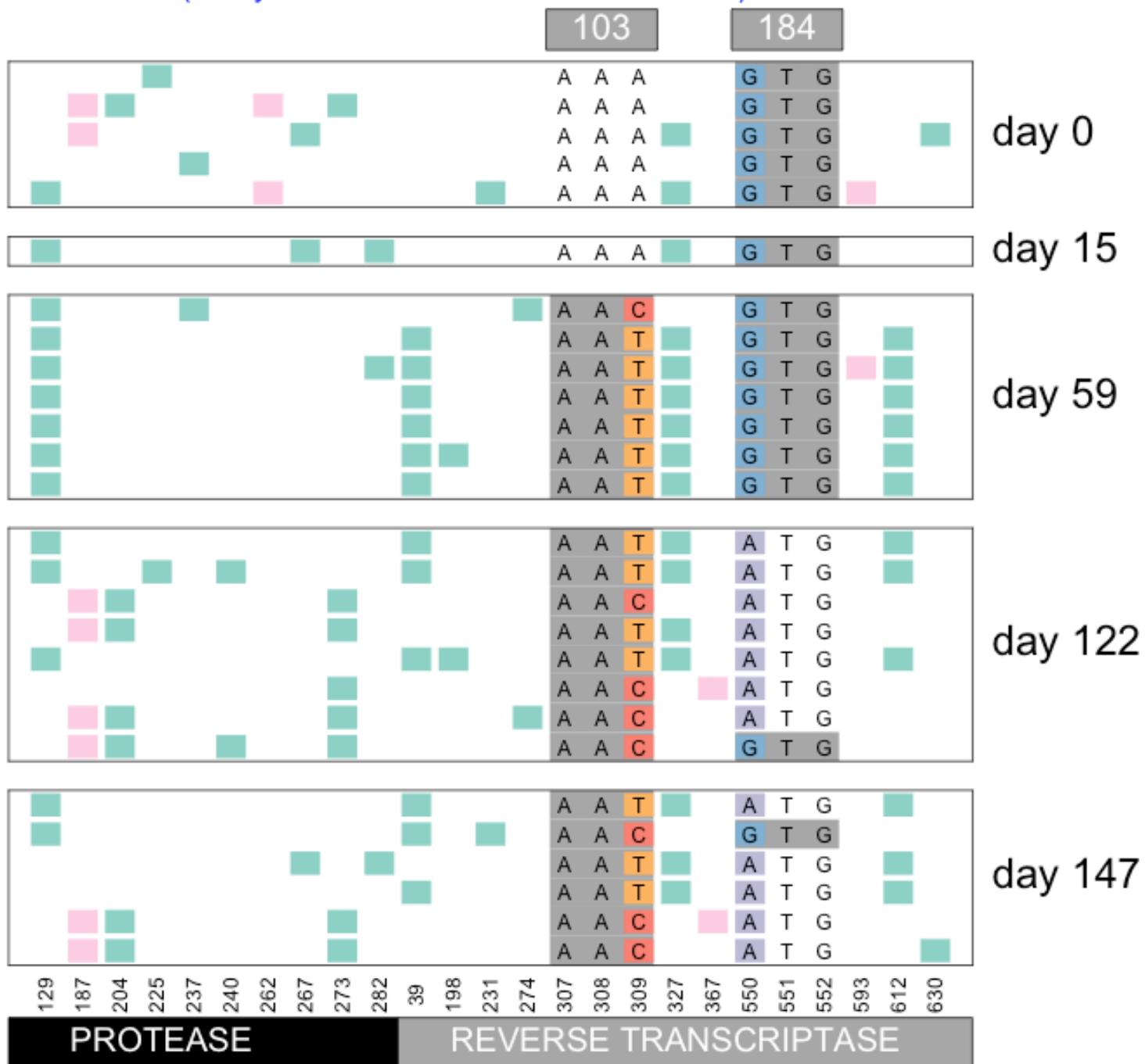
Viral sequences from patient 015

(likely treated with indinavir + efavirenz)



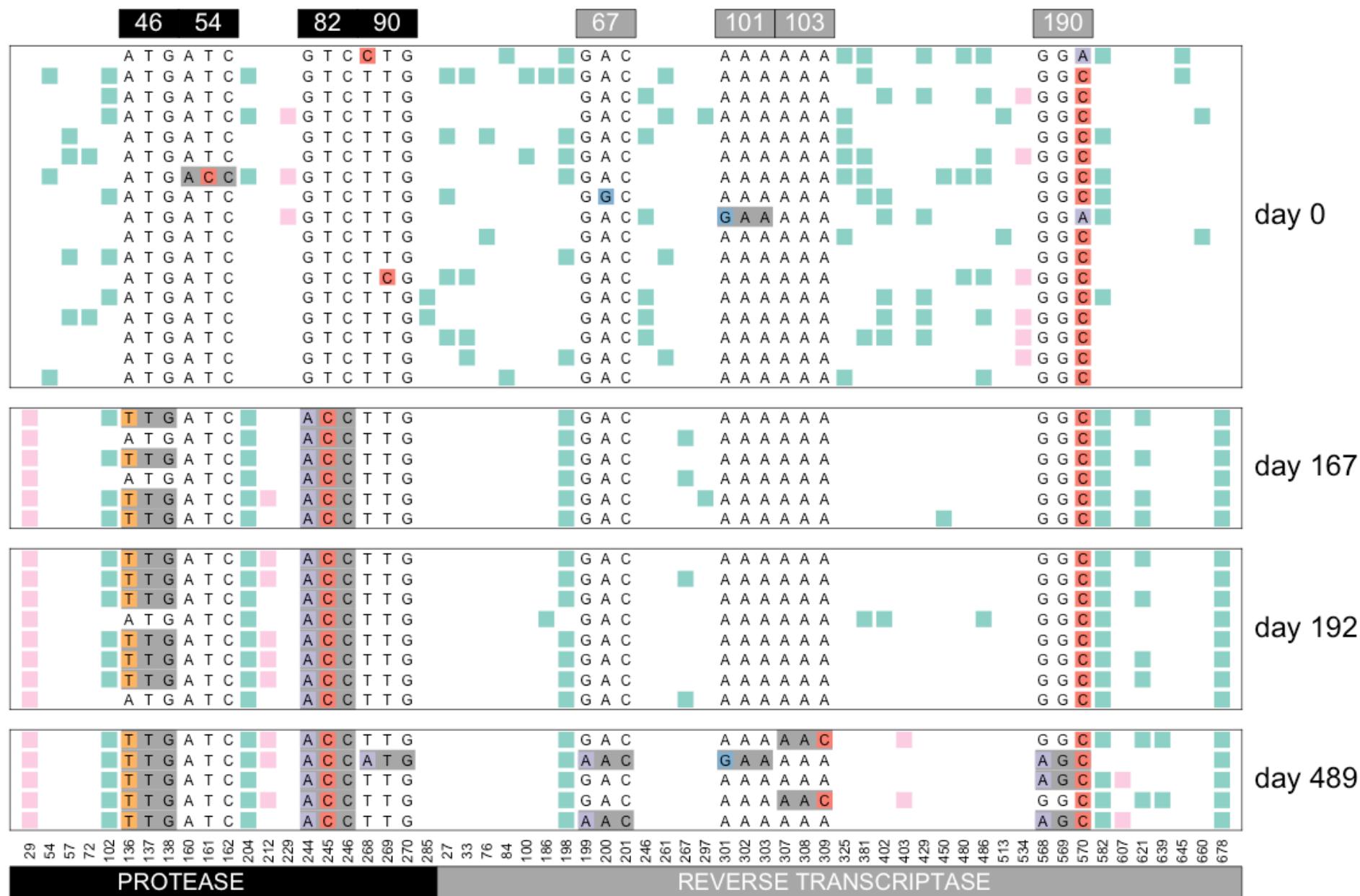
Viral sequences from patient 017

(likely treated with indinavir + efavirenz)



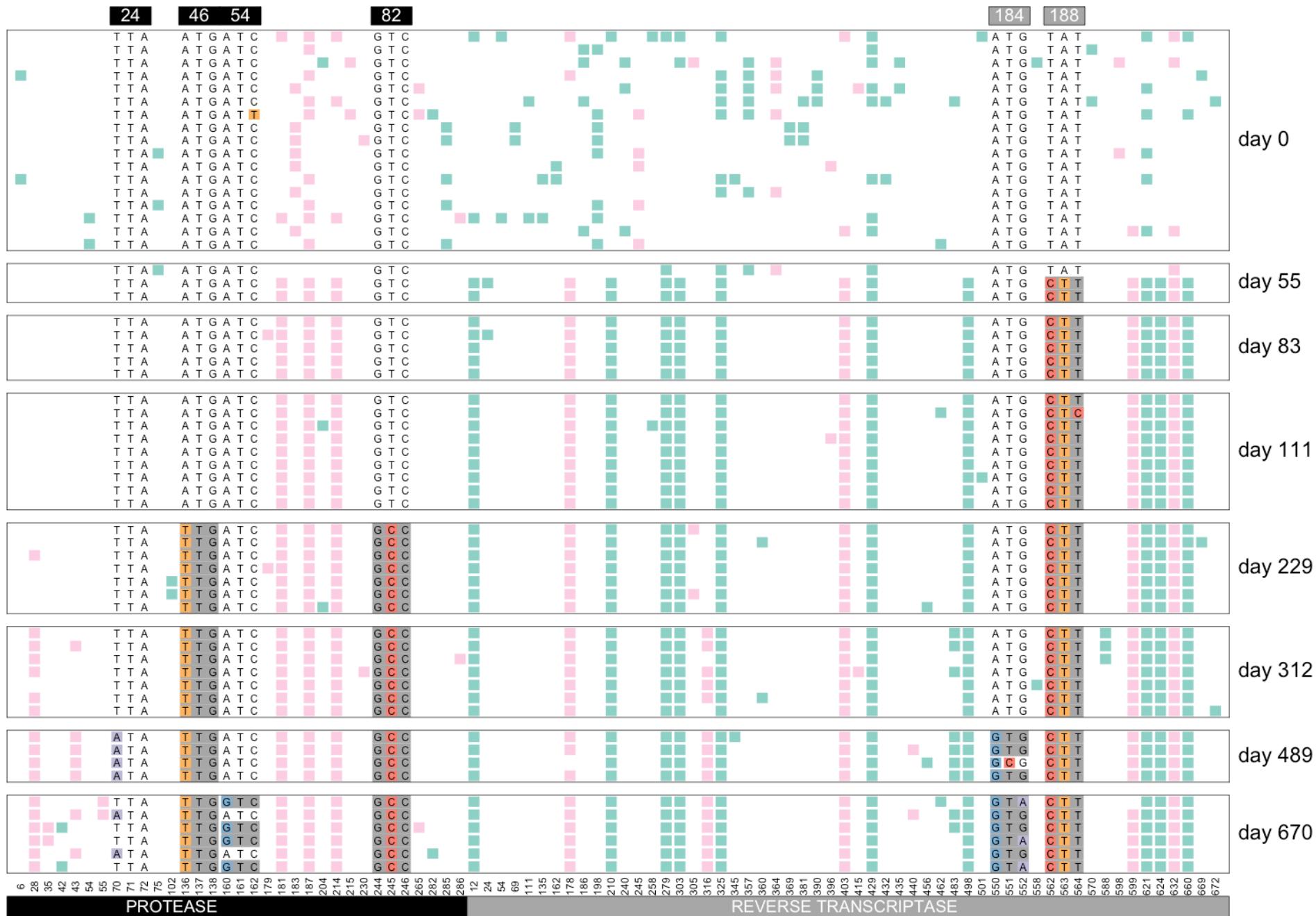
Viral sequences from patient 020

(likely treated with indinavir)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 021
 (likely treated with indinavir + efavirenz)



Viral sequences from patient 022

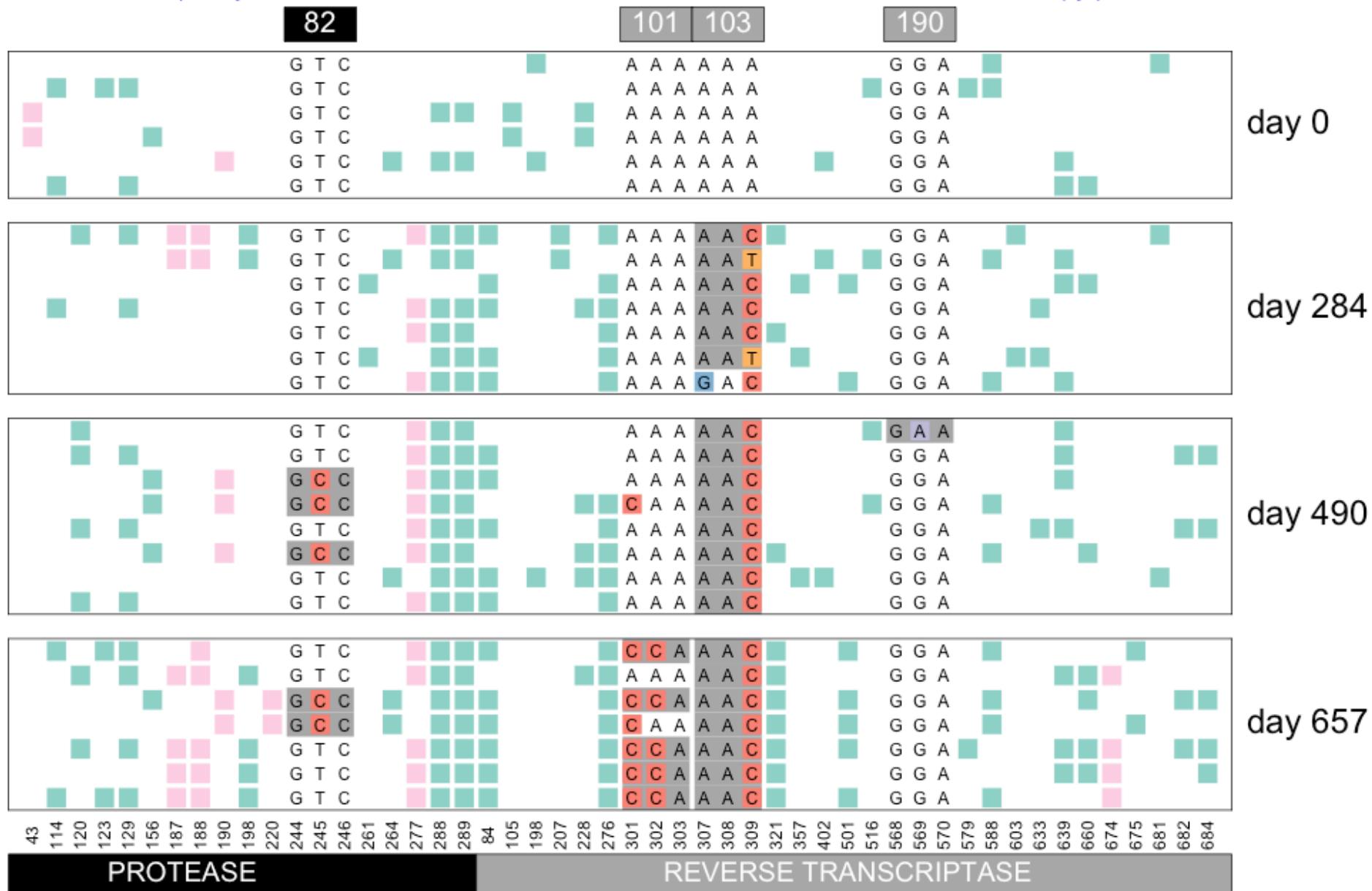
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 024

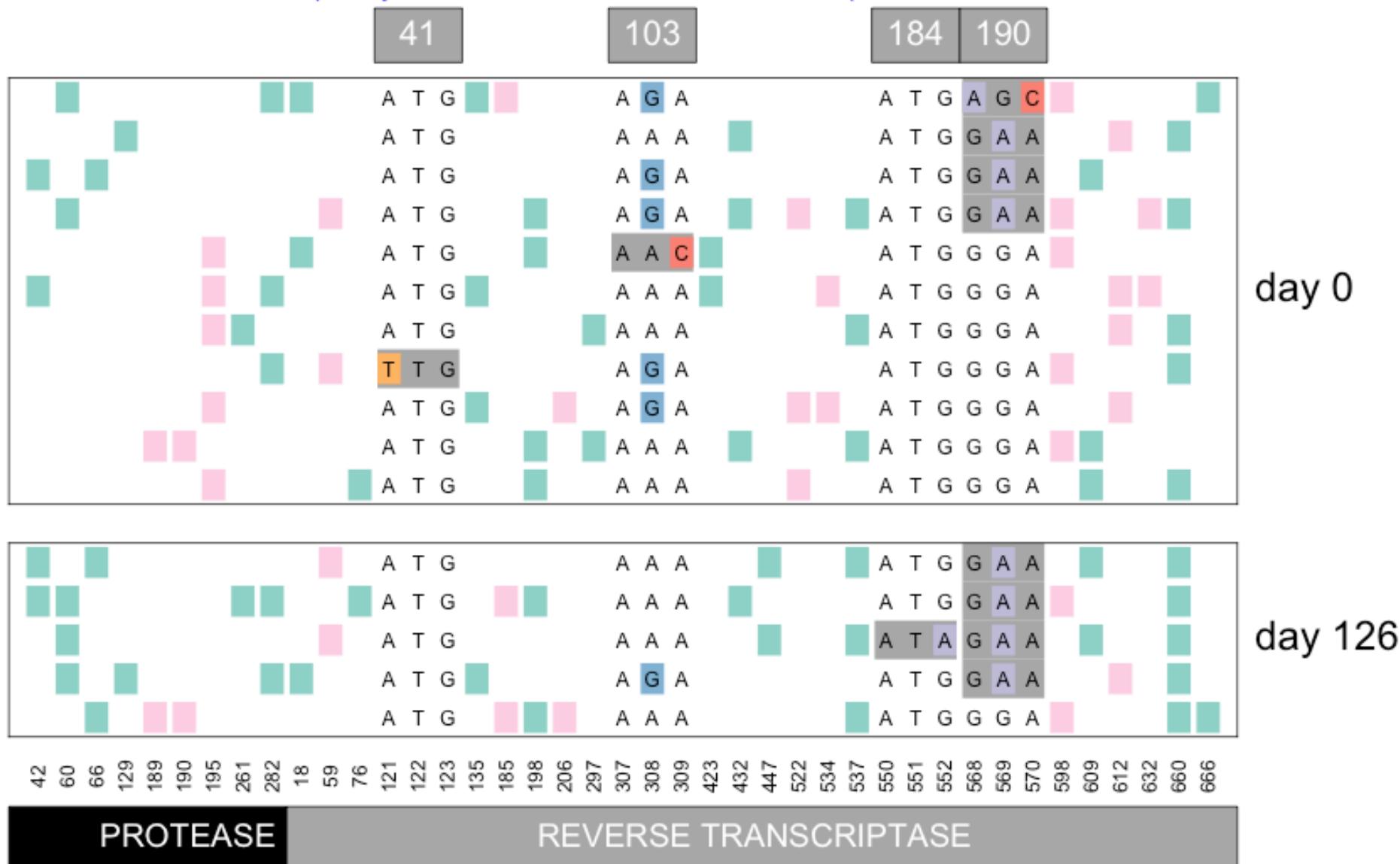
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

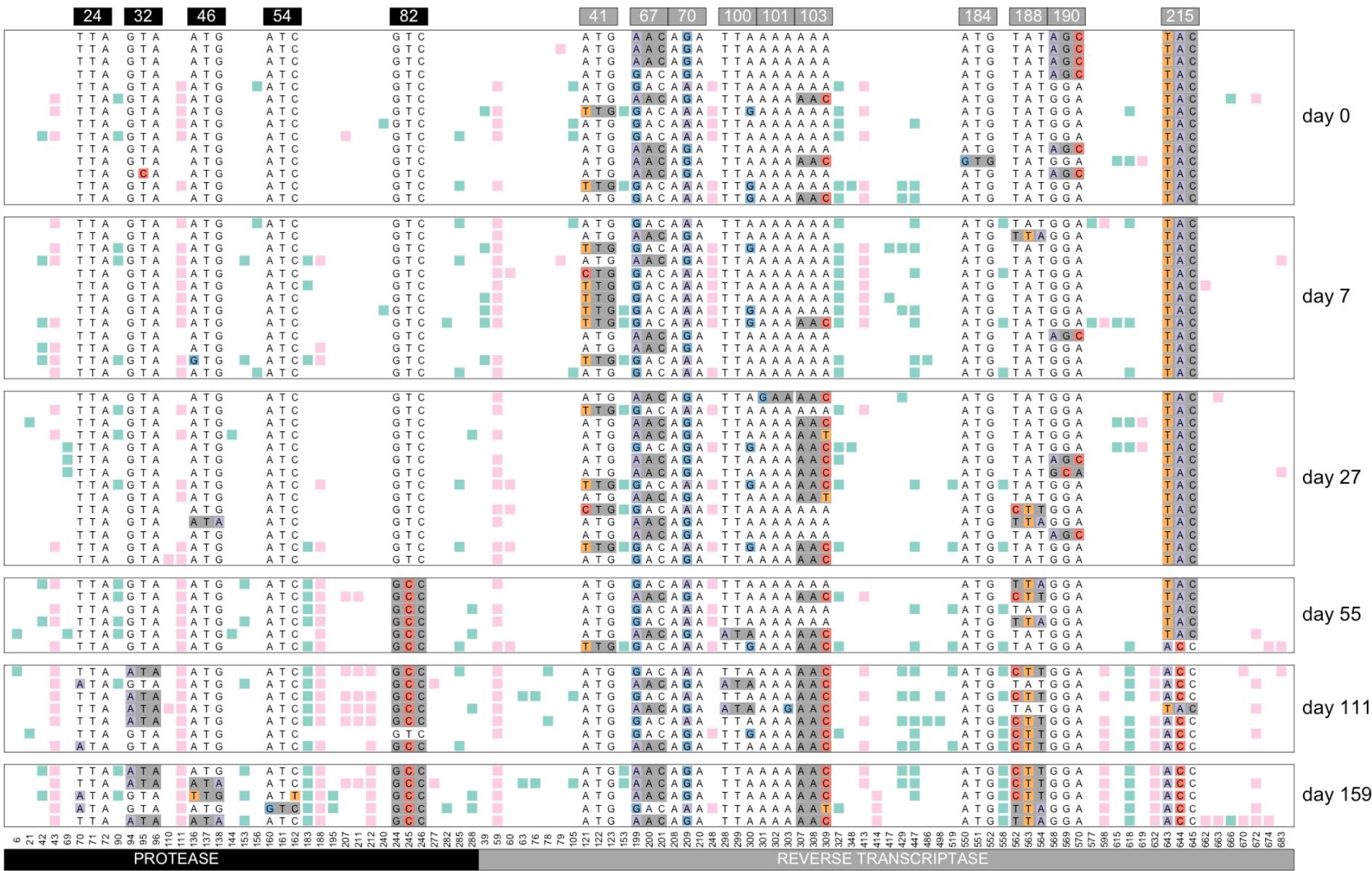
Viral sequences from patient 025

(likely treated with indinavir + efavirenz)



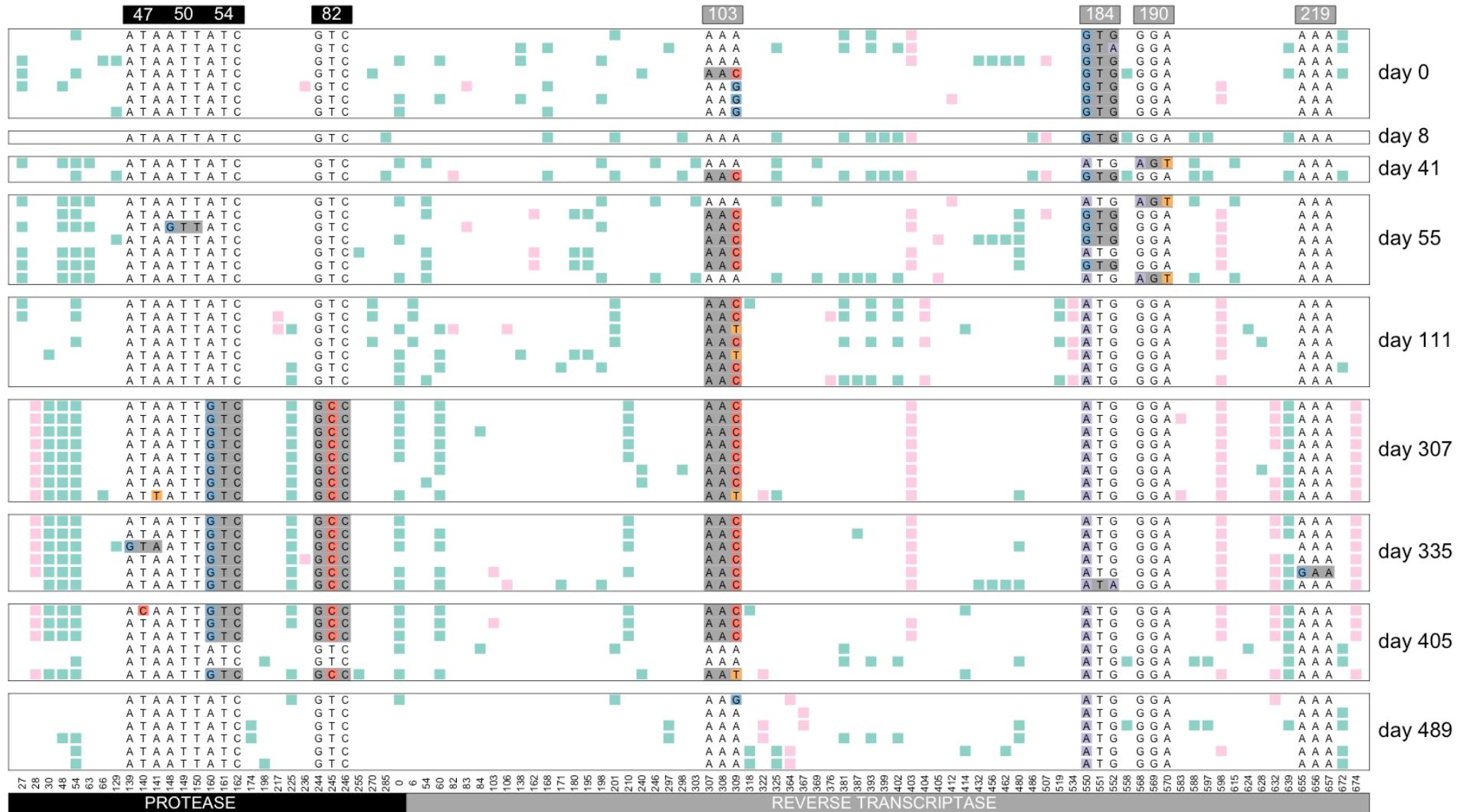
Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 026 (likely treated with indinavir + efavirenz)



Viral sequences from patient 028

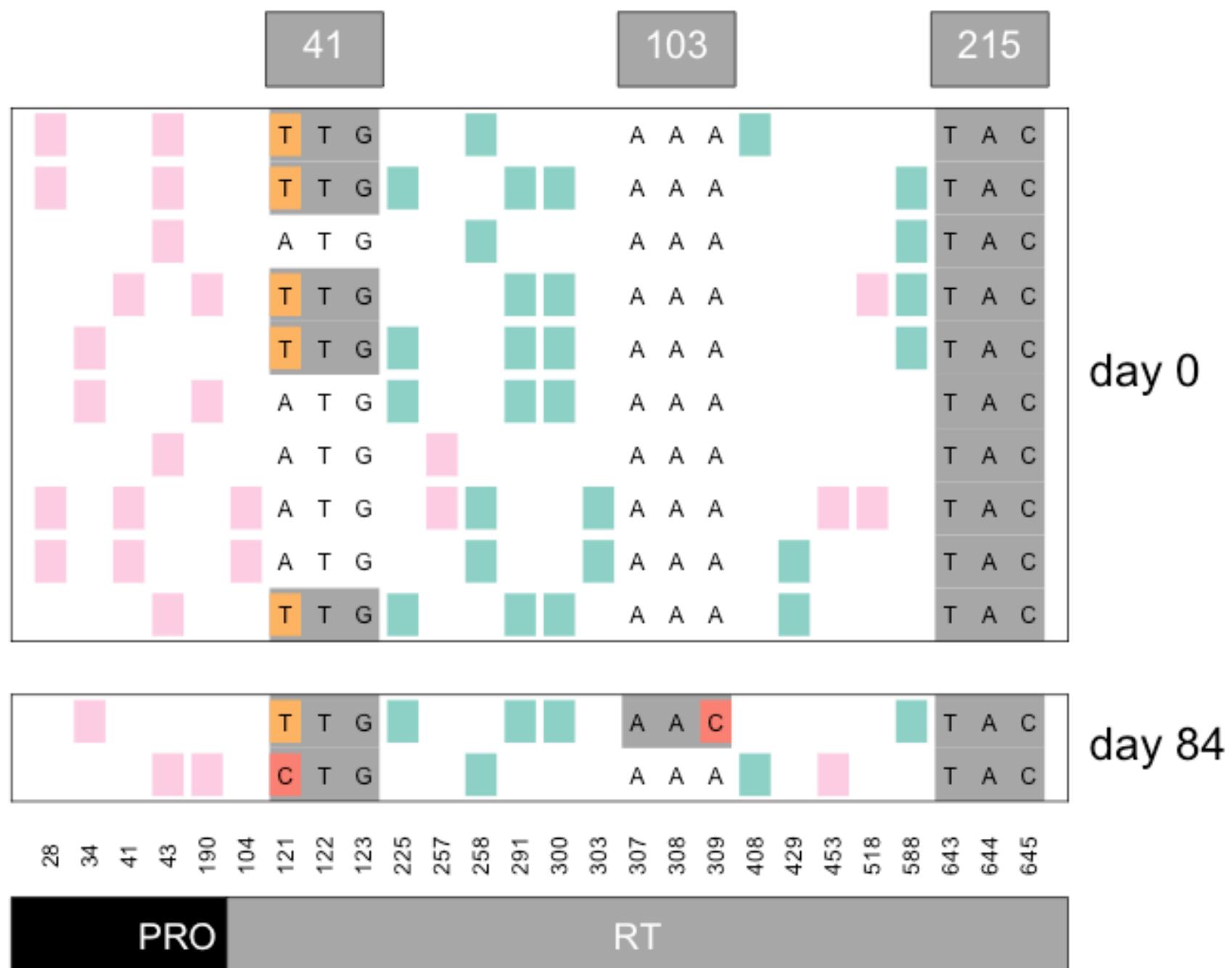
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

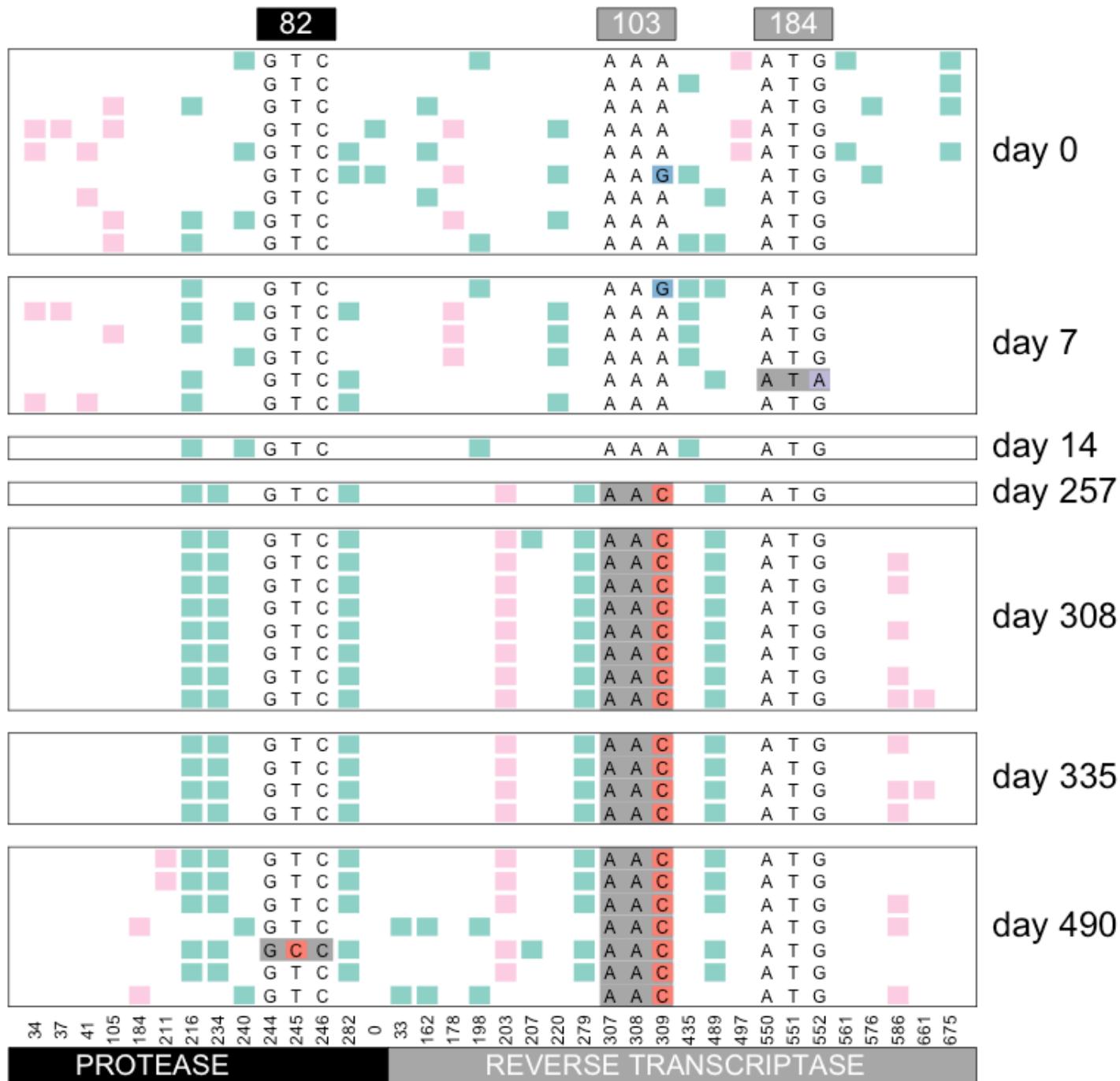
Viral sequences from patient 029

(likely treated with indinavir + efavirenz)



Viral sequences from patient 032

(likely treated with indinavir + efavirenz)



Viral sequences from patient 037

(likely treated with indinavir then later switched to efavirenz combination therapy)

24	46	54	65	103
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A	T	A	A	T	A	A	T	C	A	A	A	A	A	C
A	T	A	A	T	A	A	T	C	A	A	A	A	A	C
A	T	A	A	T	A	A	T	C	A	A	A	A	A	C
A	T	A	A	T	A	A	T	C	A	A	A	A	A	C
A	T	A	A	T	A	A	C	C	A	A	A	A	A	C
A	T	A	A	T	A	A	T	C	A	A	A	A	A	C
A	T	A	A	T	A	A	T	C	A	A	A	A	A	C

day 422

		A	T	A	A	T	A	A	T	C	A	A	A	A	C
		A	T	A	A	T	A	A	T	C	A	A	A	A	C
		A	T	A	A	T	A	A	T	C		A	A	A	C
		A	T	A	A	T	A	A	T	C		A	A	A	C
		A	T	A	A	T	A	A	T	C		A	A	A	A
		A	T	A	A	T	A	A	T	C		A	A	A	C
		A	T	A	A	T	A	A	T	C		A	G	A	C
		A	T	A	A	T	A	A	T	C		A	A	A	C

day 589

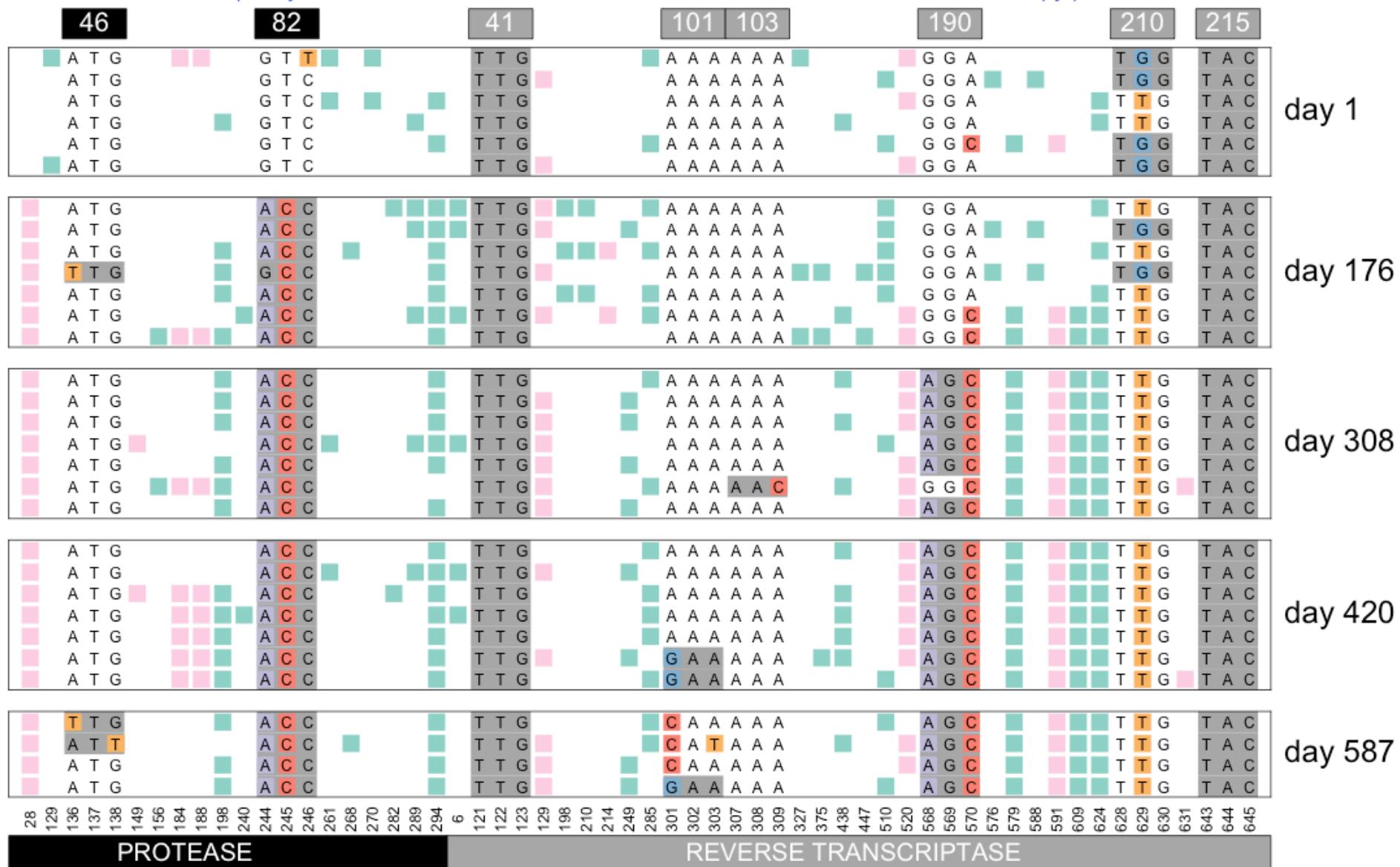
28 43 70 71 72 136 137 138 160 161 162 211 277 193 194 195 307 308 309

PRO

RT

Viral sequences from patient 039

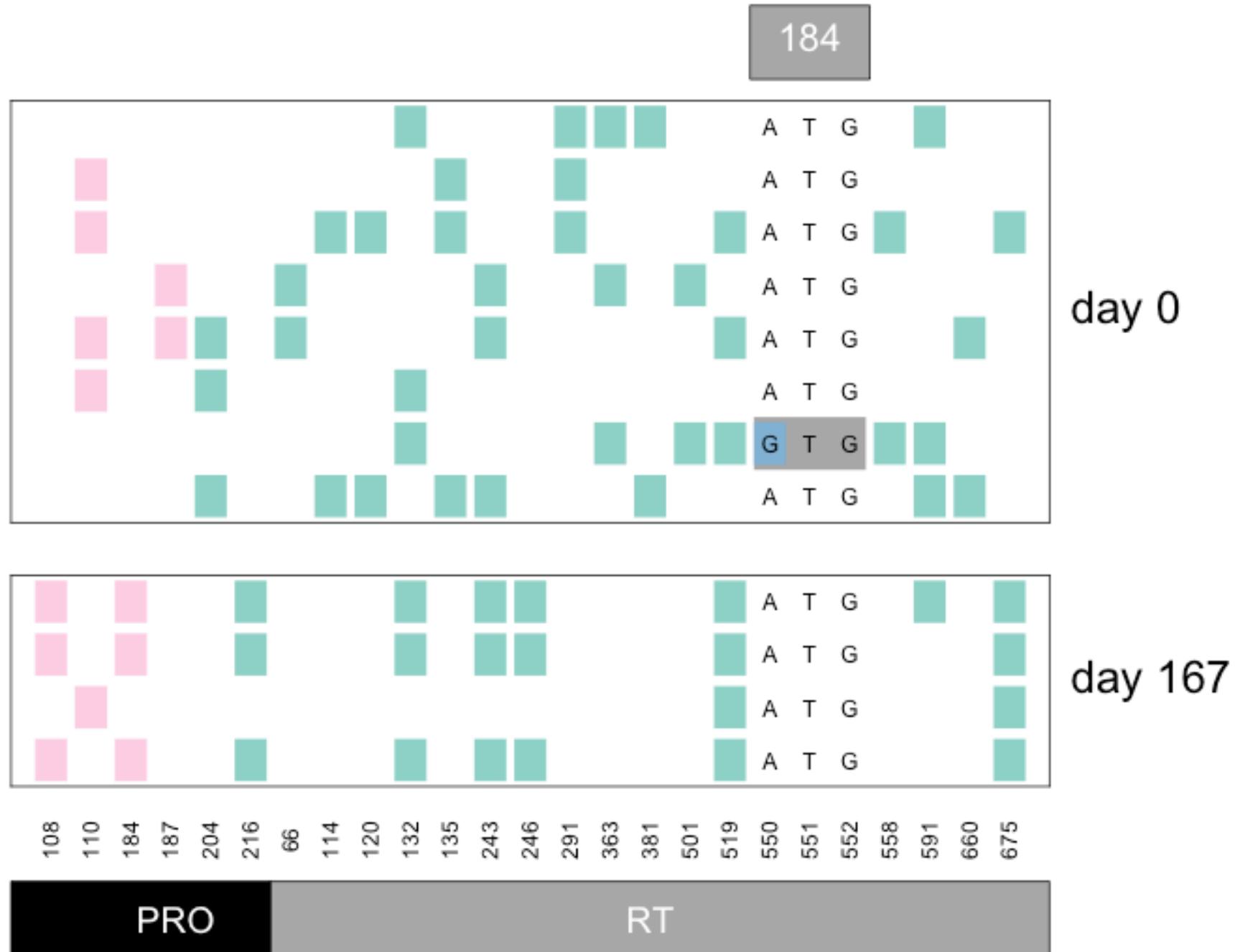
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

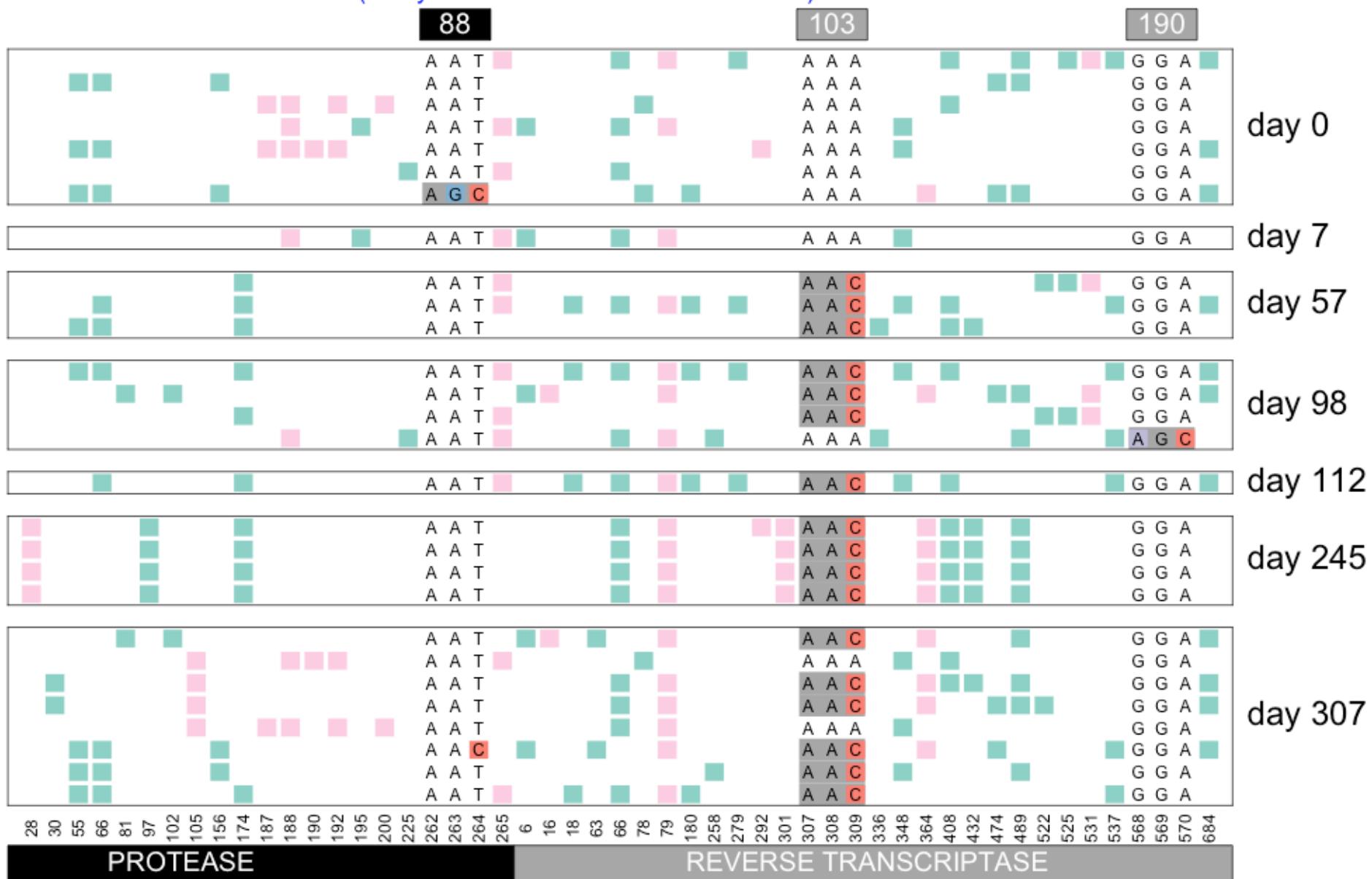
Viral sequences from patient 043

(likely treated with indinavir then later switched to efavirenz combination therapy)



Viral sequences from patient 044

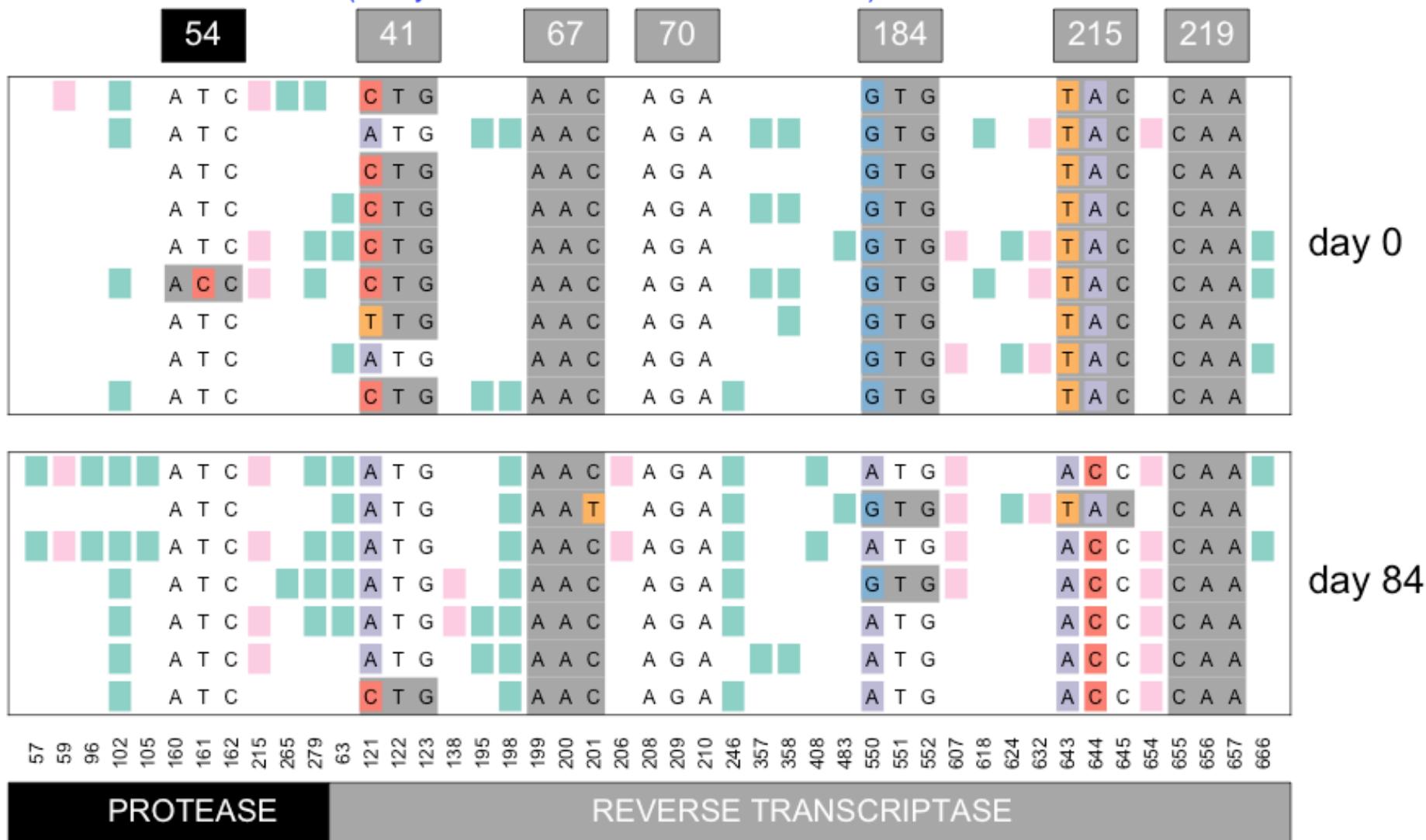
(likely treated with indinavir + efavirenz)



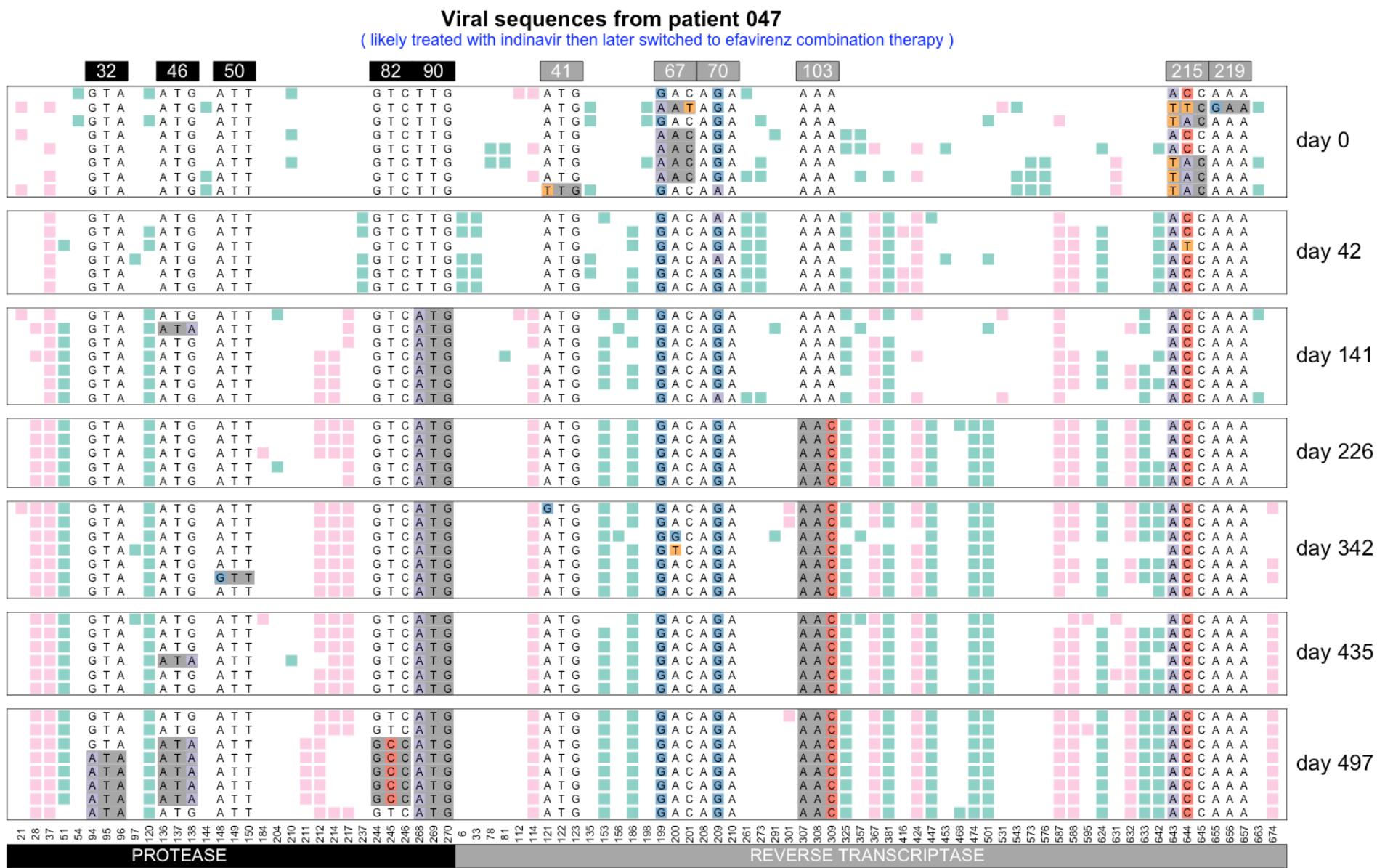
Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 045

(likely treated with indinavir + efavirenz)



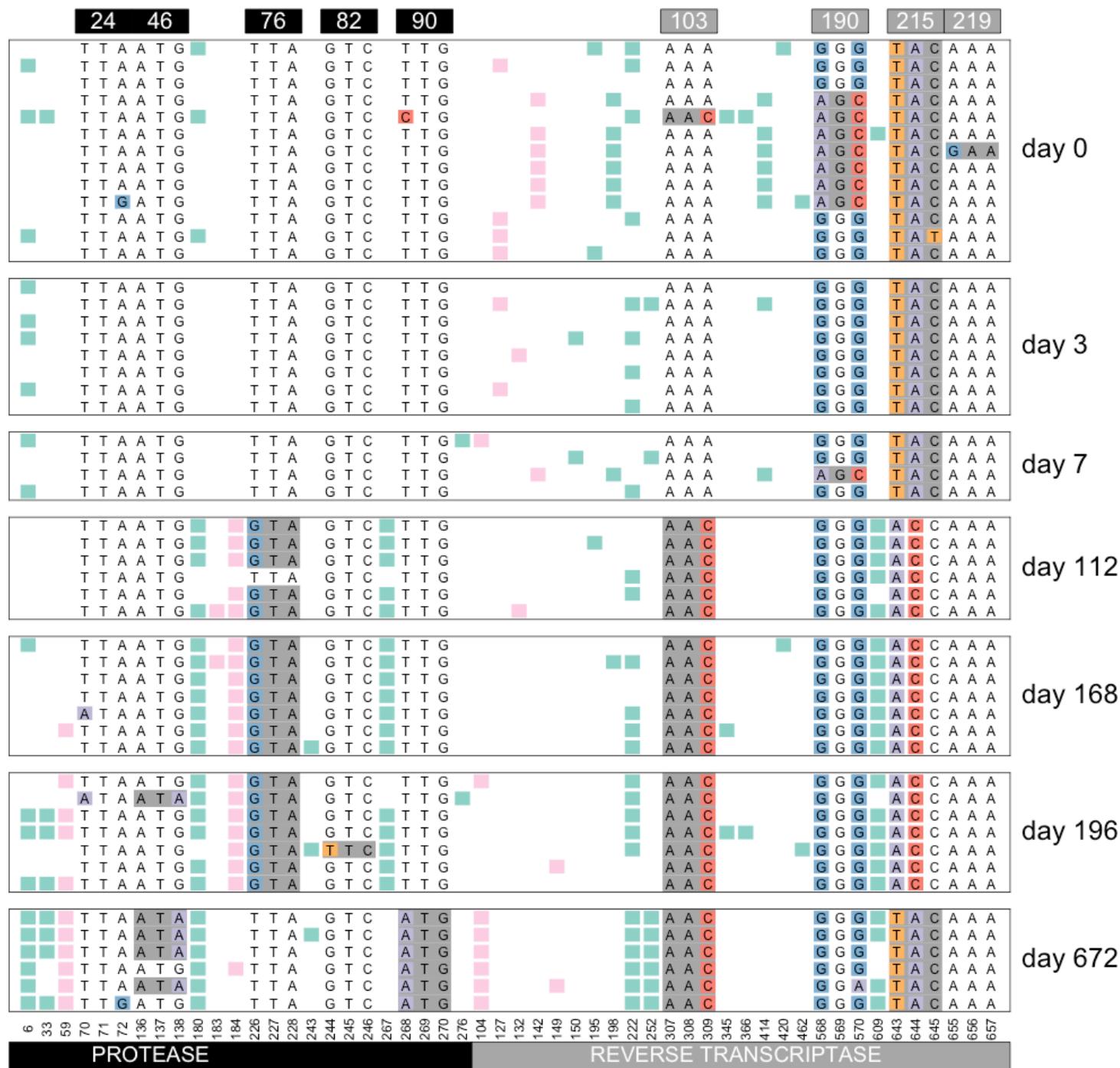
Williams, Pennings, 2018. Data from Bacheler et al 2000



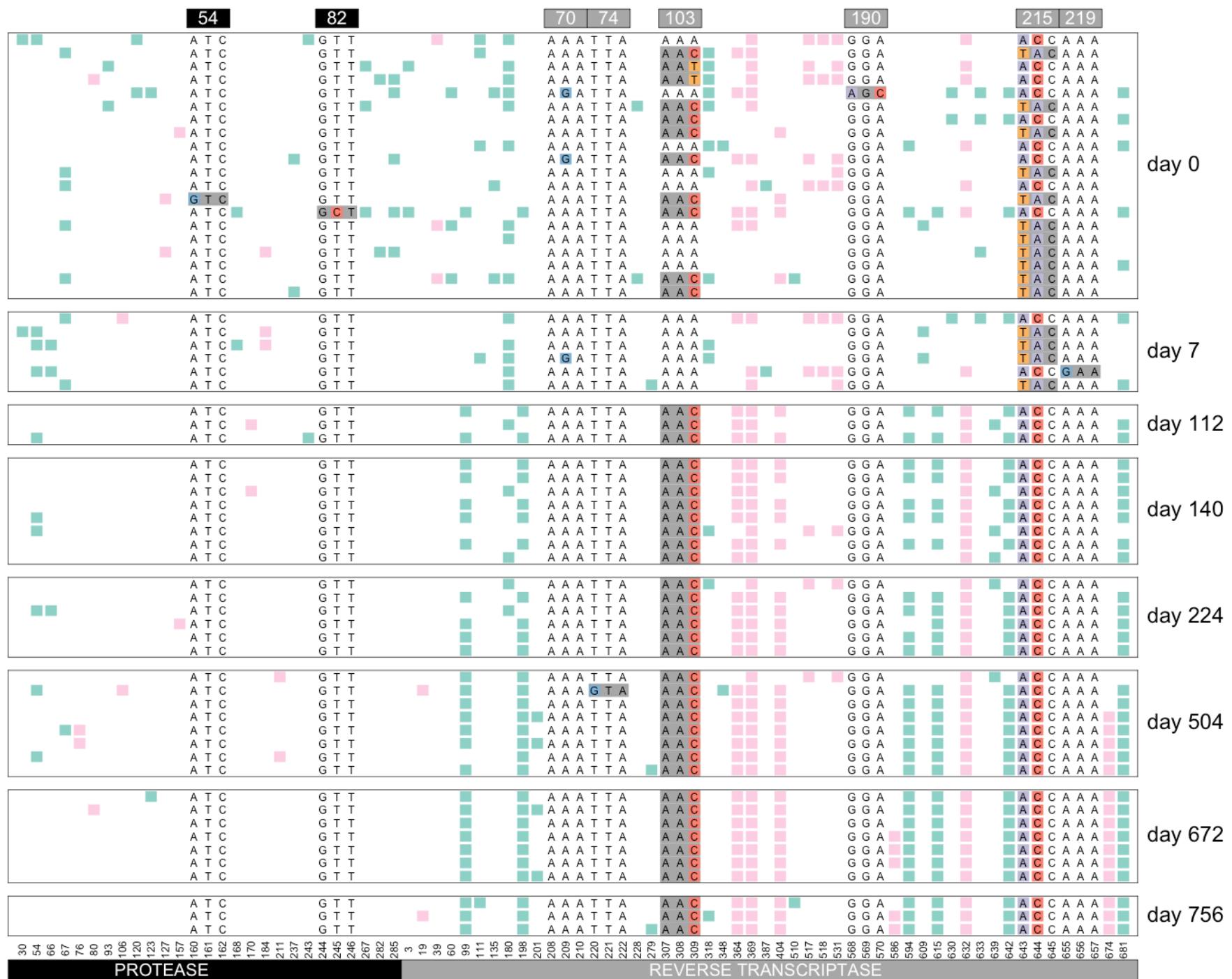
Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 050

(likely treated with indinavir + efavirenz)

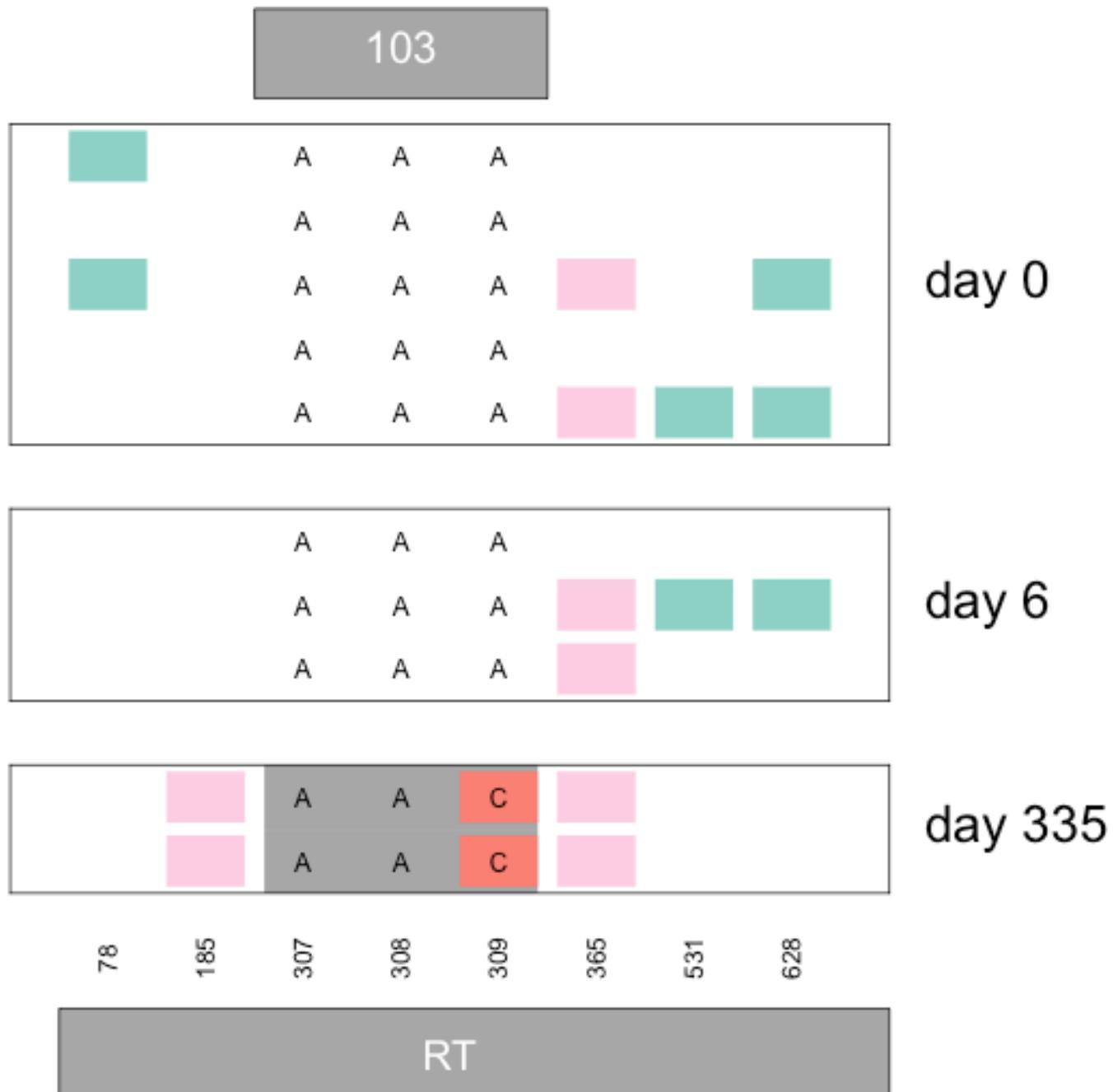


Viral sequences from patient 055
 (likely treated with indinavir + efavirenz)



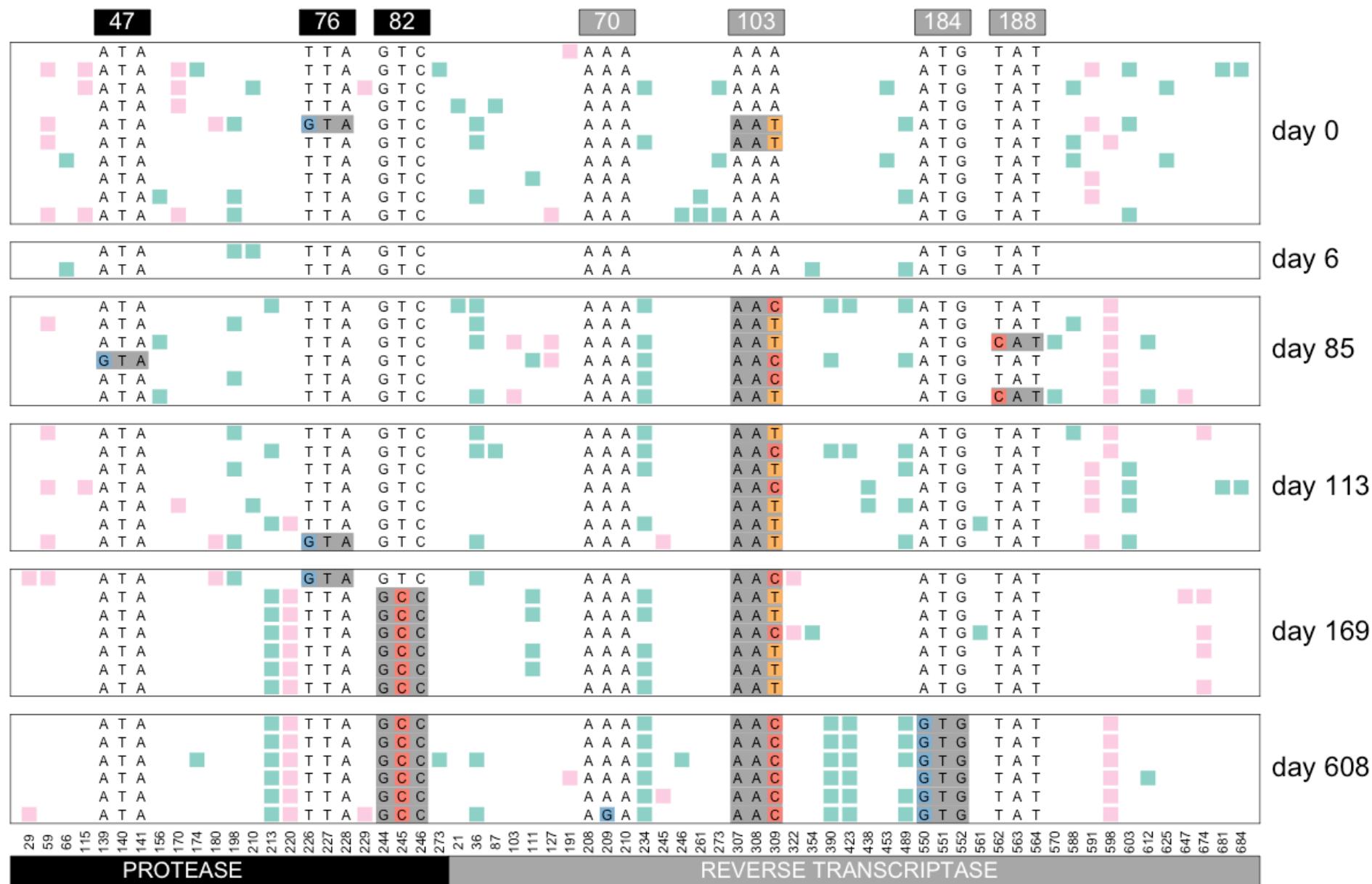
Viral sequences from patient 056

(likely treated with indinavir + efavirenz)



Viral sequences from patient 057

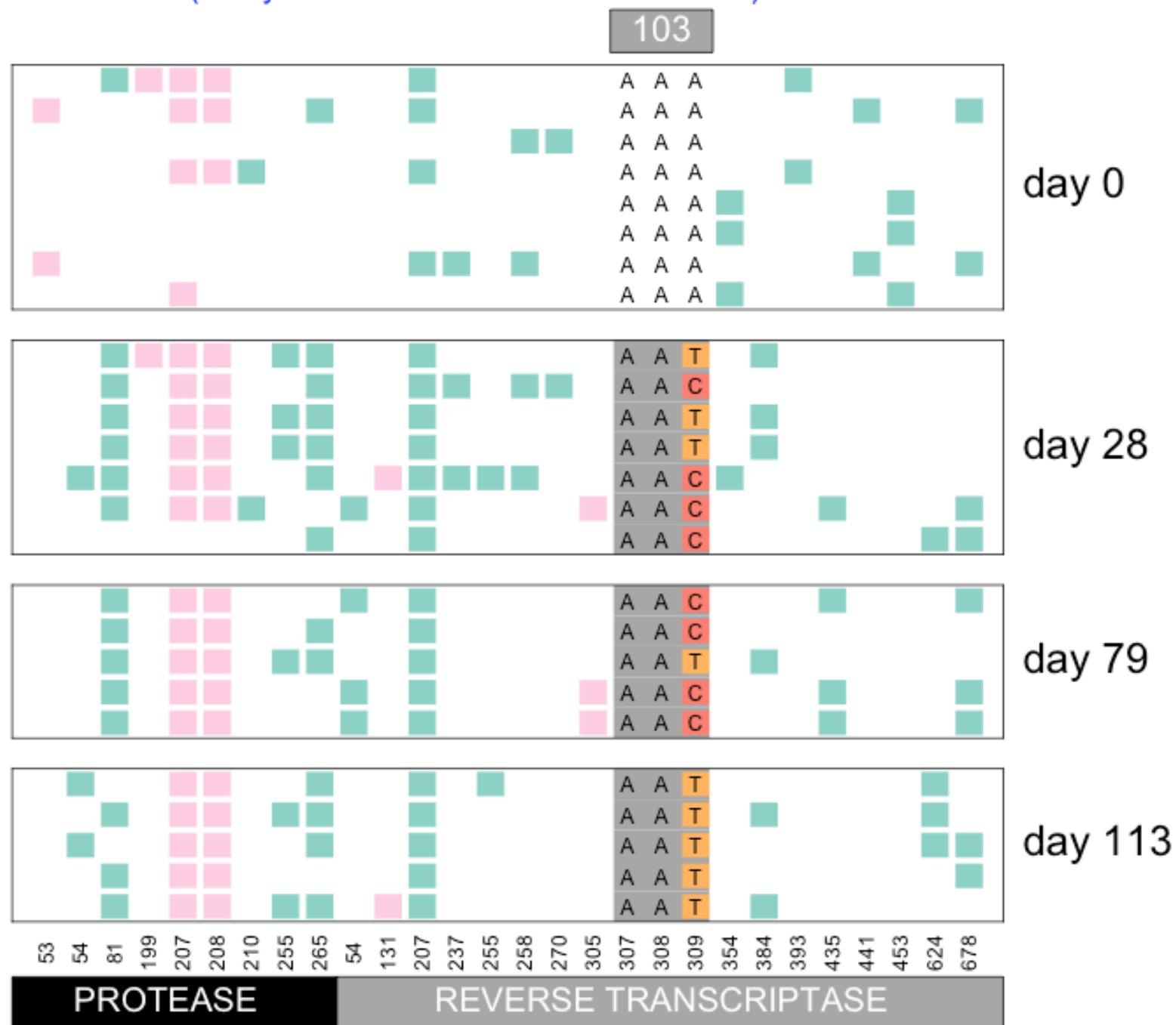
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

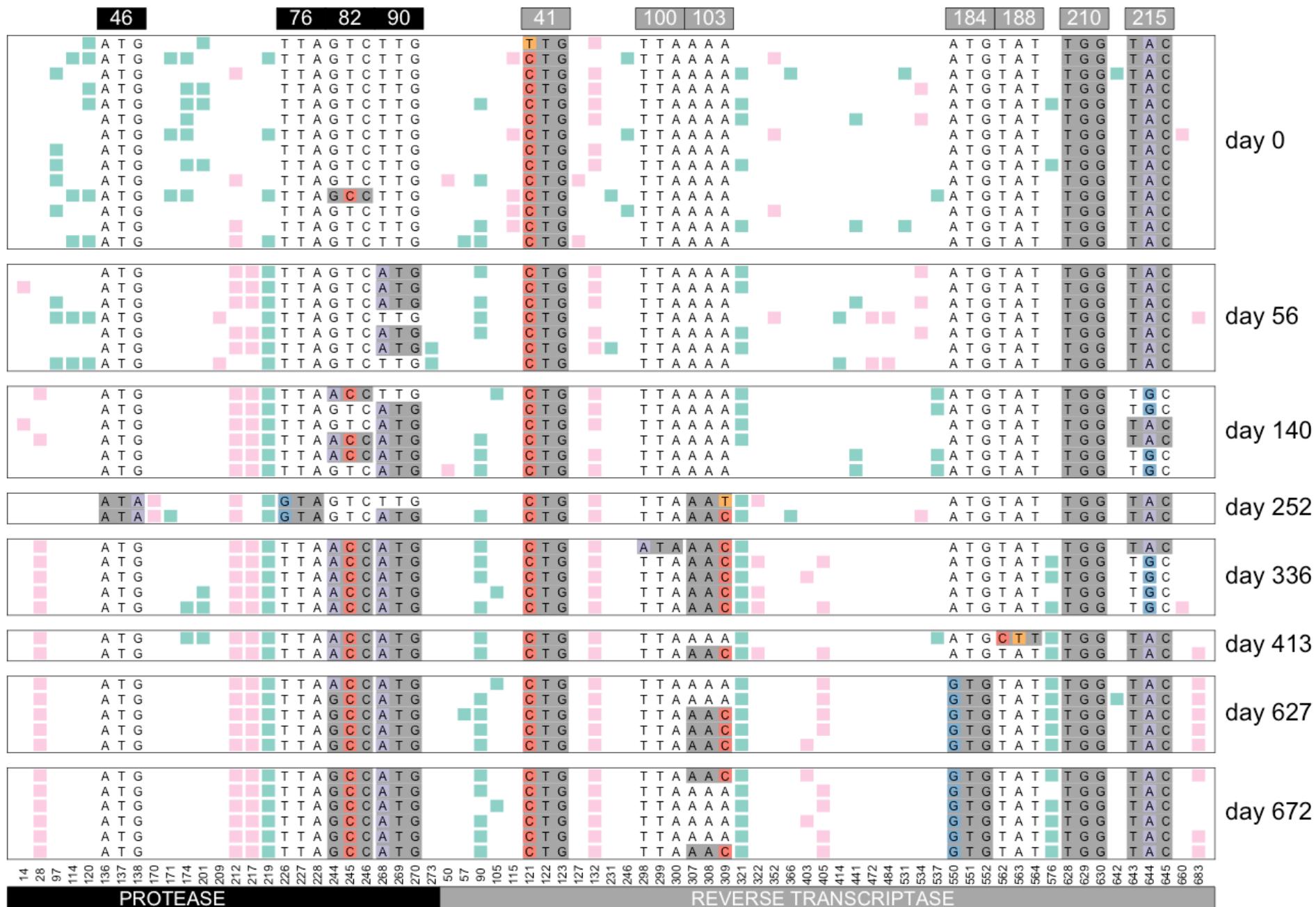
Viral sequences from patient 058

(likely treated with indinavir + efavirenz)



Viral sequences from patient 060

(likely treated with indinavir then later switched to efavirenz combination therapy)



Viral sequences from patient 062

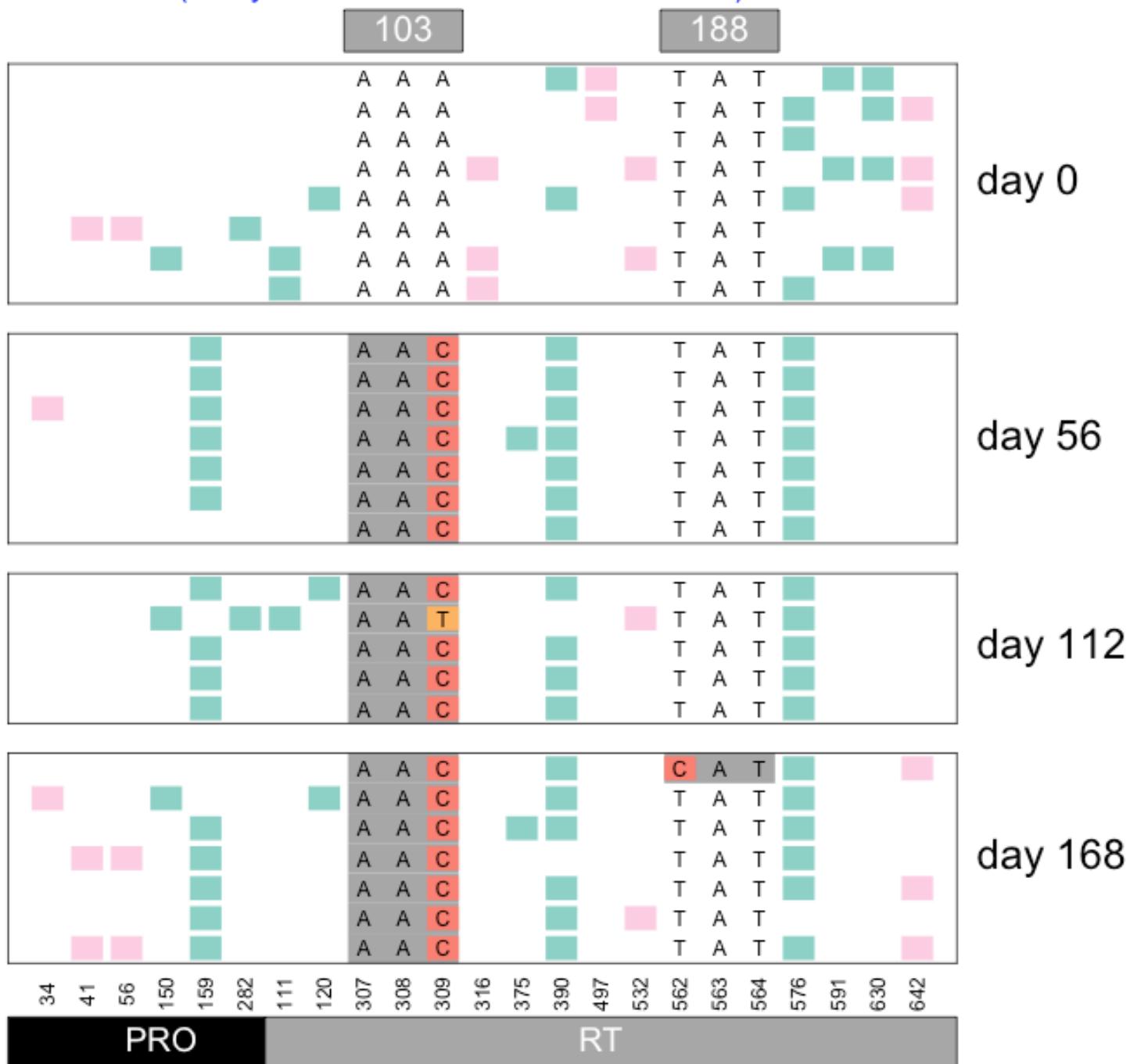
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 063

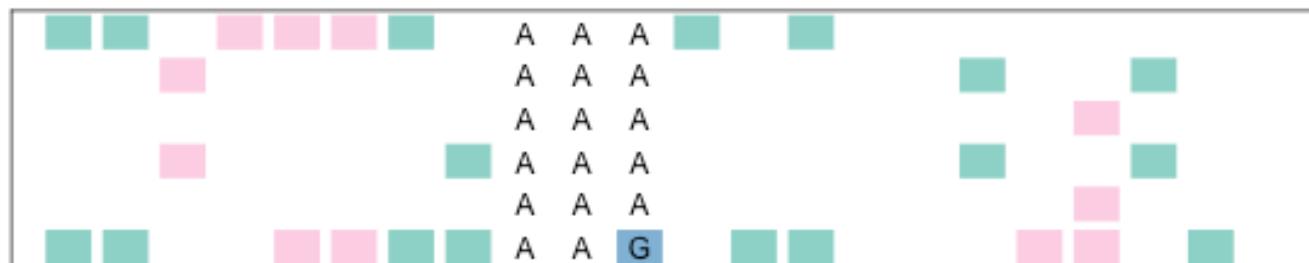
(likely treated with indinavir + efavirenz)



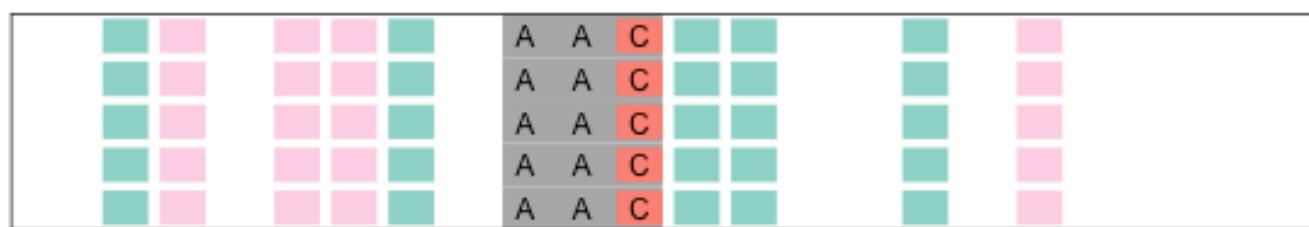
Viral sequences from patient 066

(likely treated with indinavir + efavirenz)

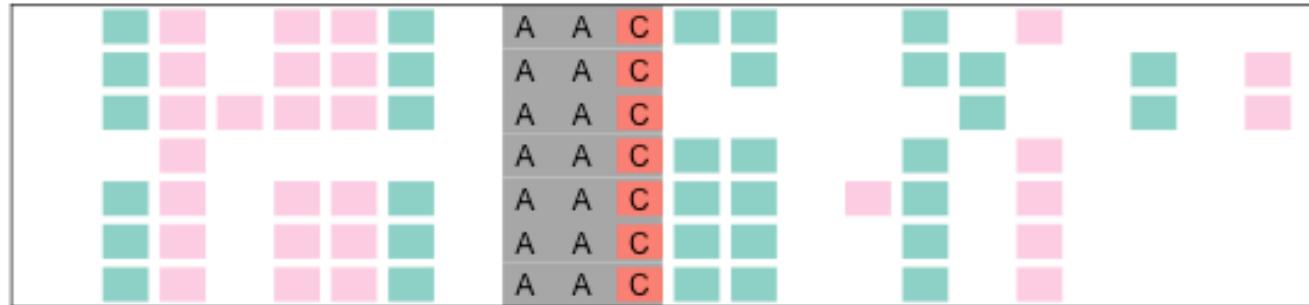
103



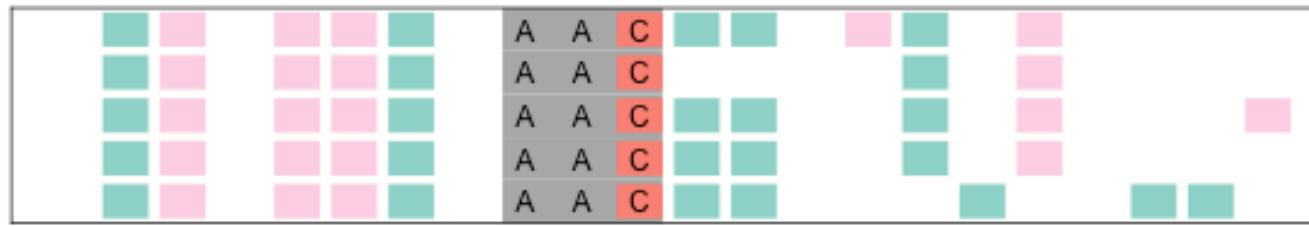
day 0



day 277



day 308



day 336

30

48

115

134

184

205

222

PROTEASE

REVERSE TRANSCRIPTASE

111

307

308

309

327

381

444

461

549

613

620

632

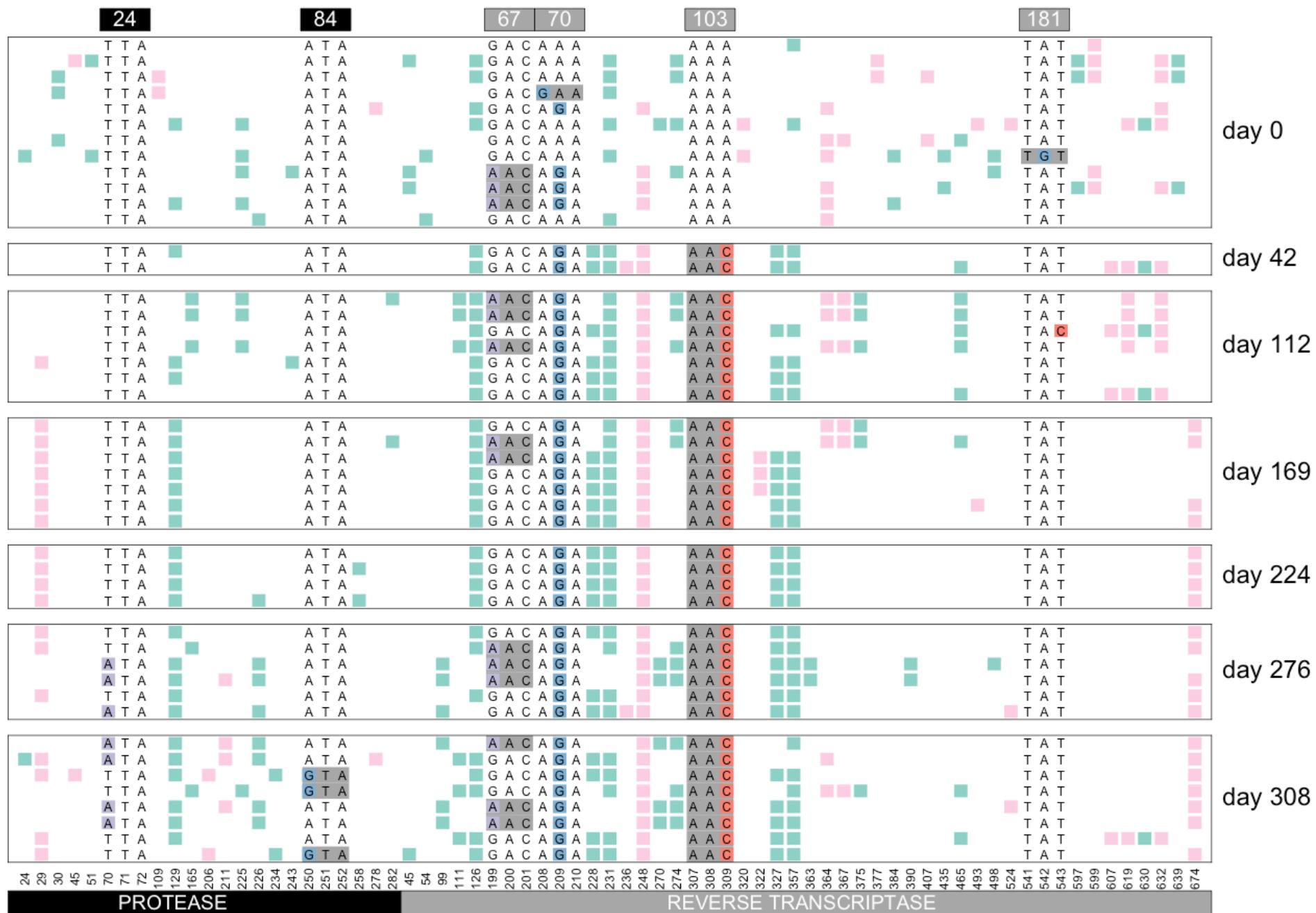
657

663

674

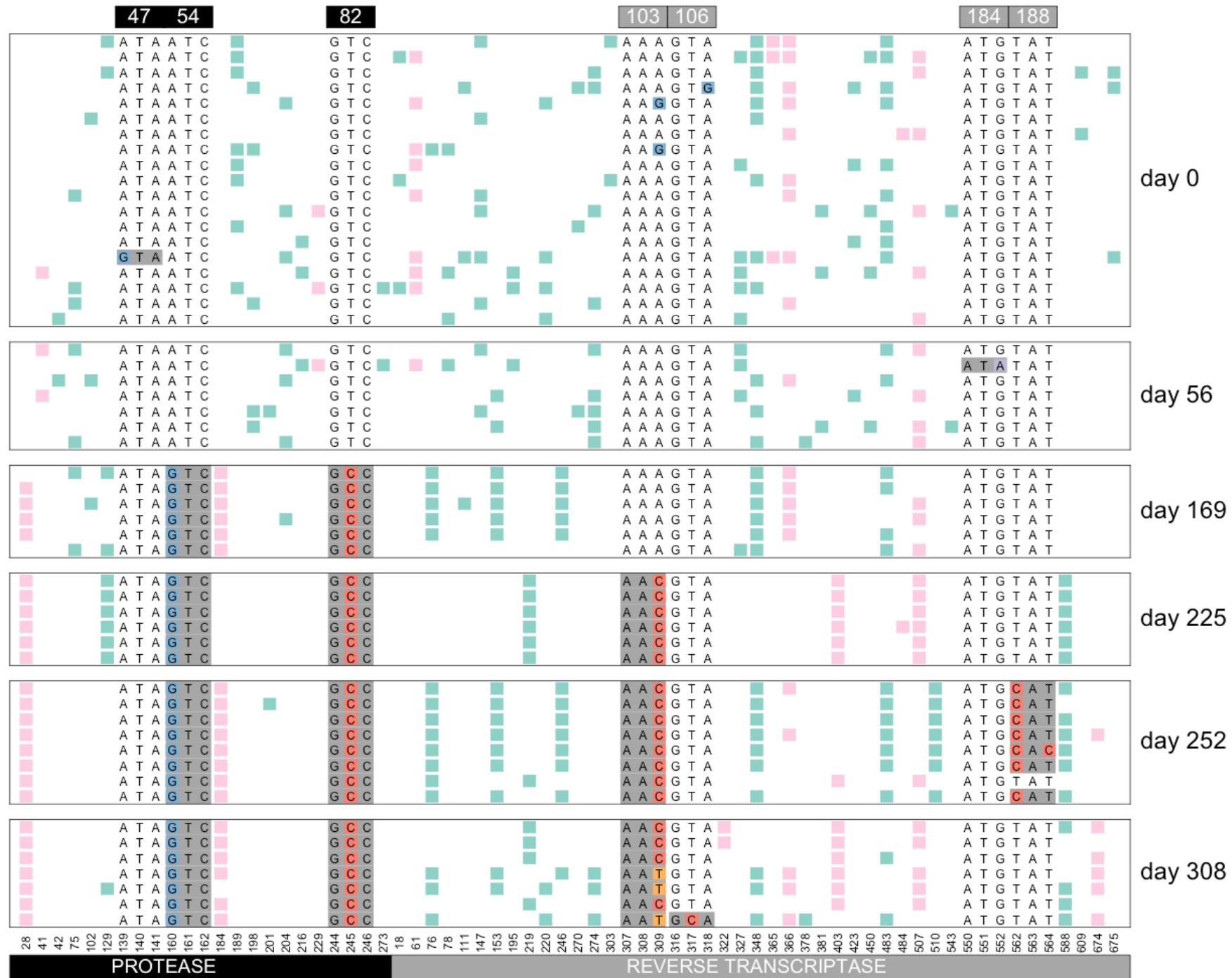
Viral sequences from patient 069

(likely treated with indinavir + efavirenz)



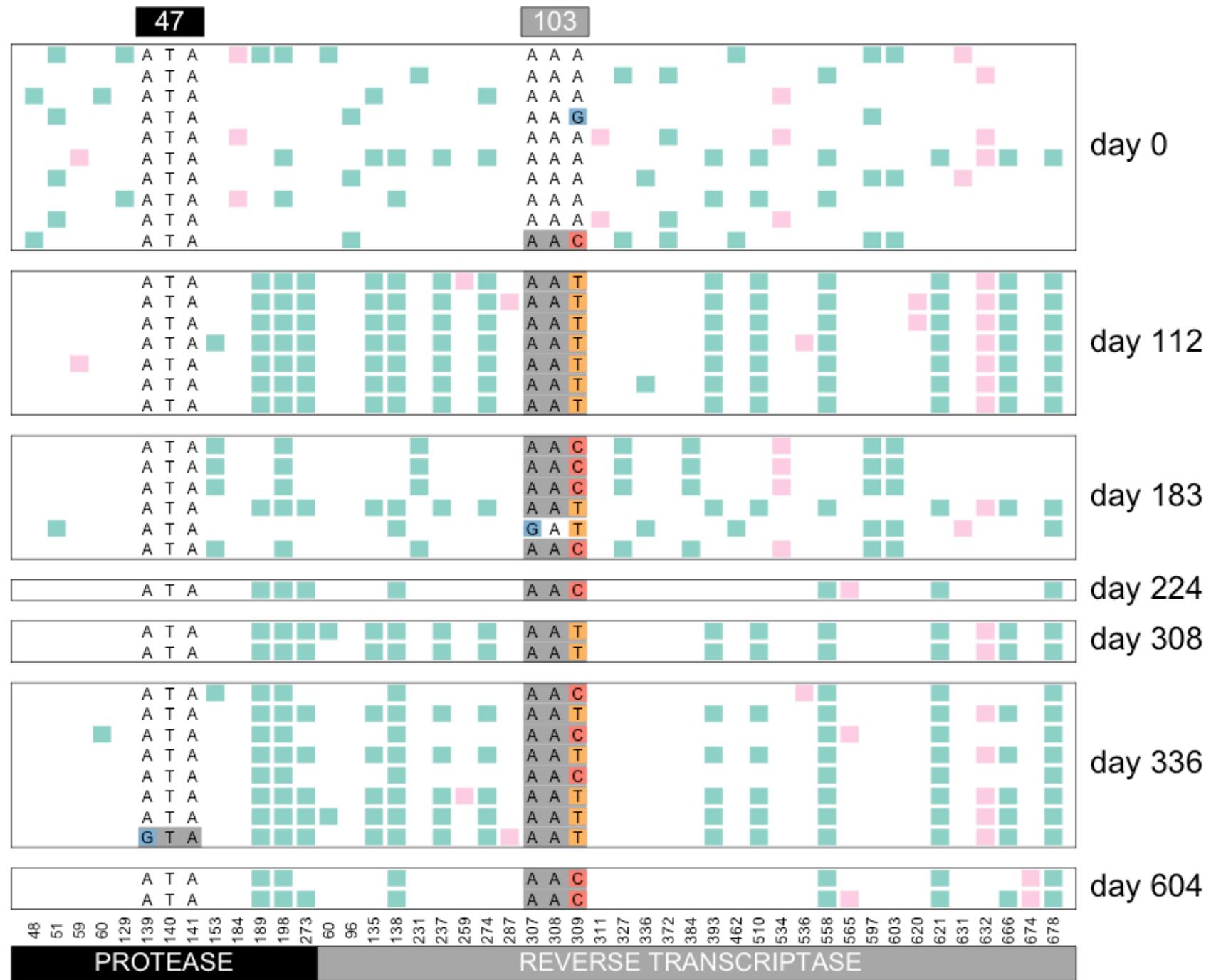
Viral sequences from patient 070

(likely treated with indinavir then later switched to efavirenz combination therapy)



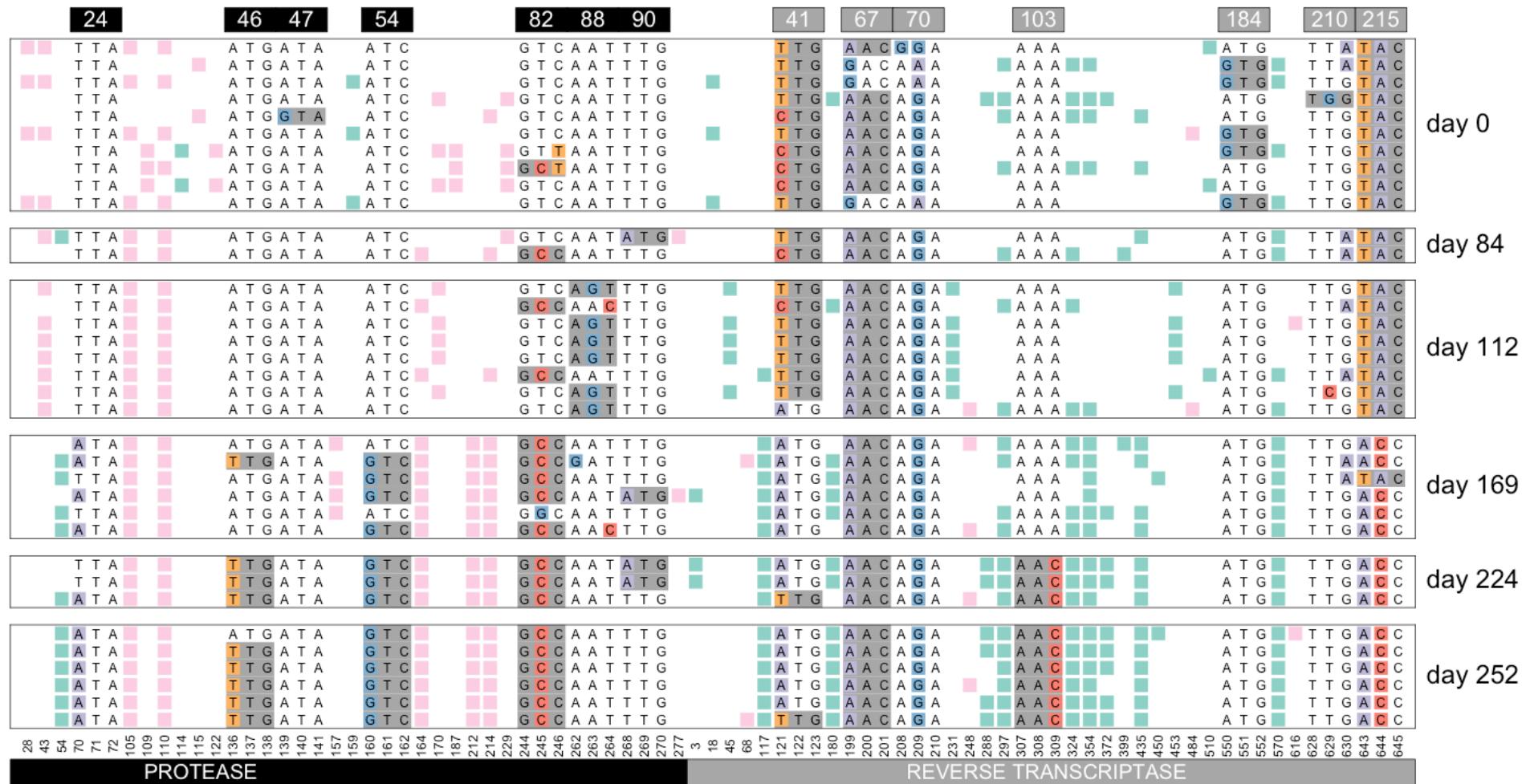
Viral sequences from patient 071

(likely treated with indinavir + efavirenz)



Viral sequences from patient 072

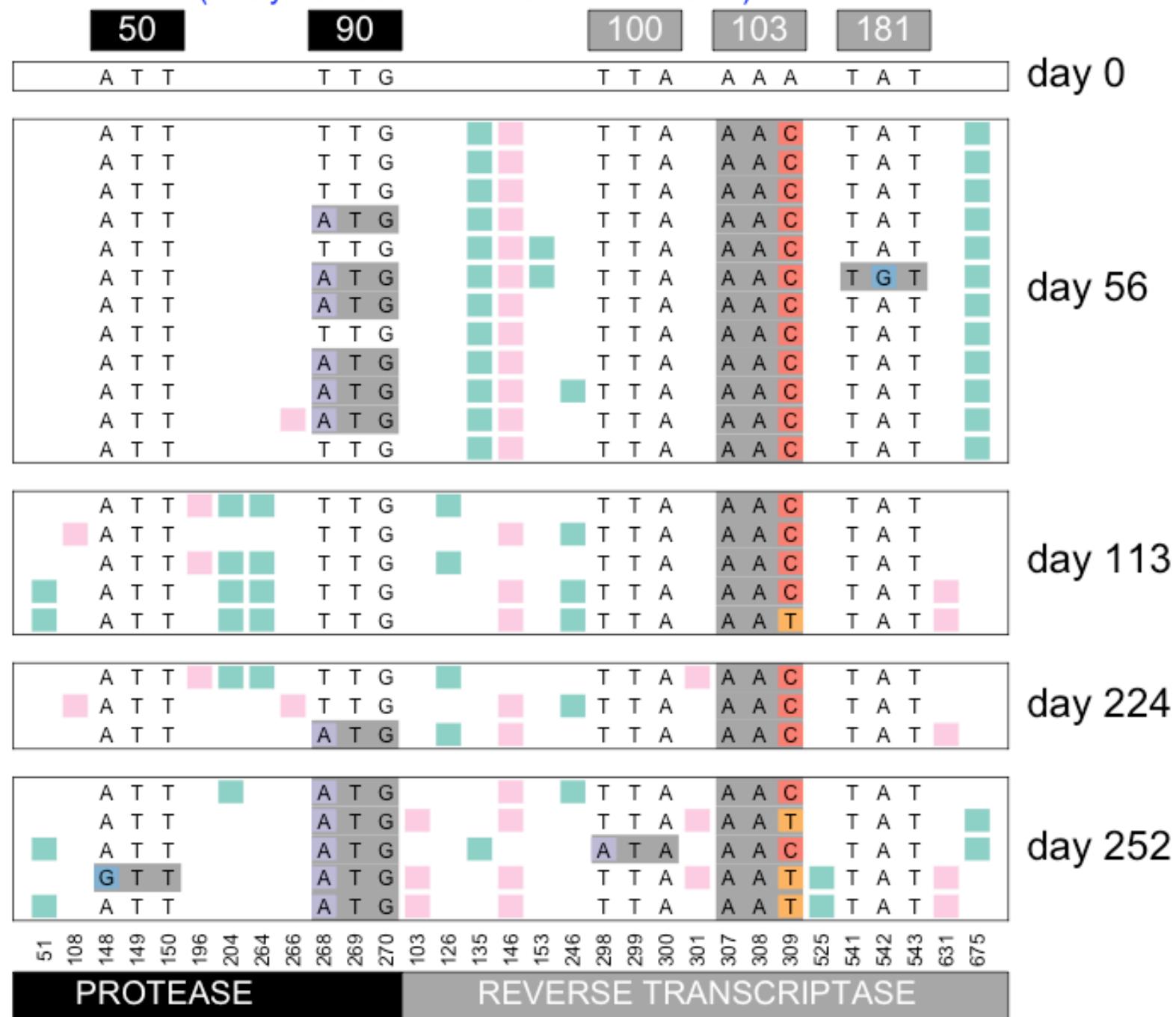
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

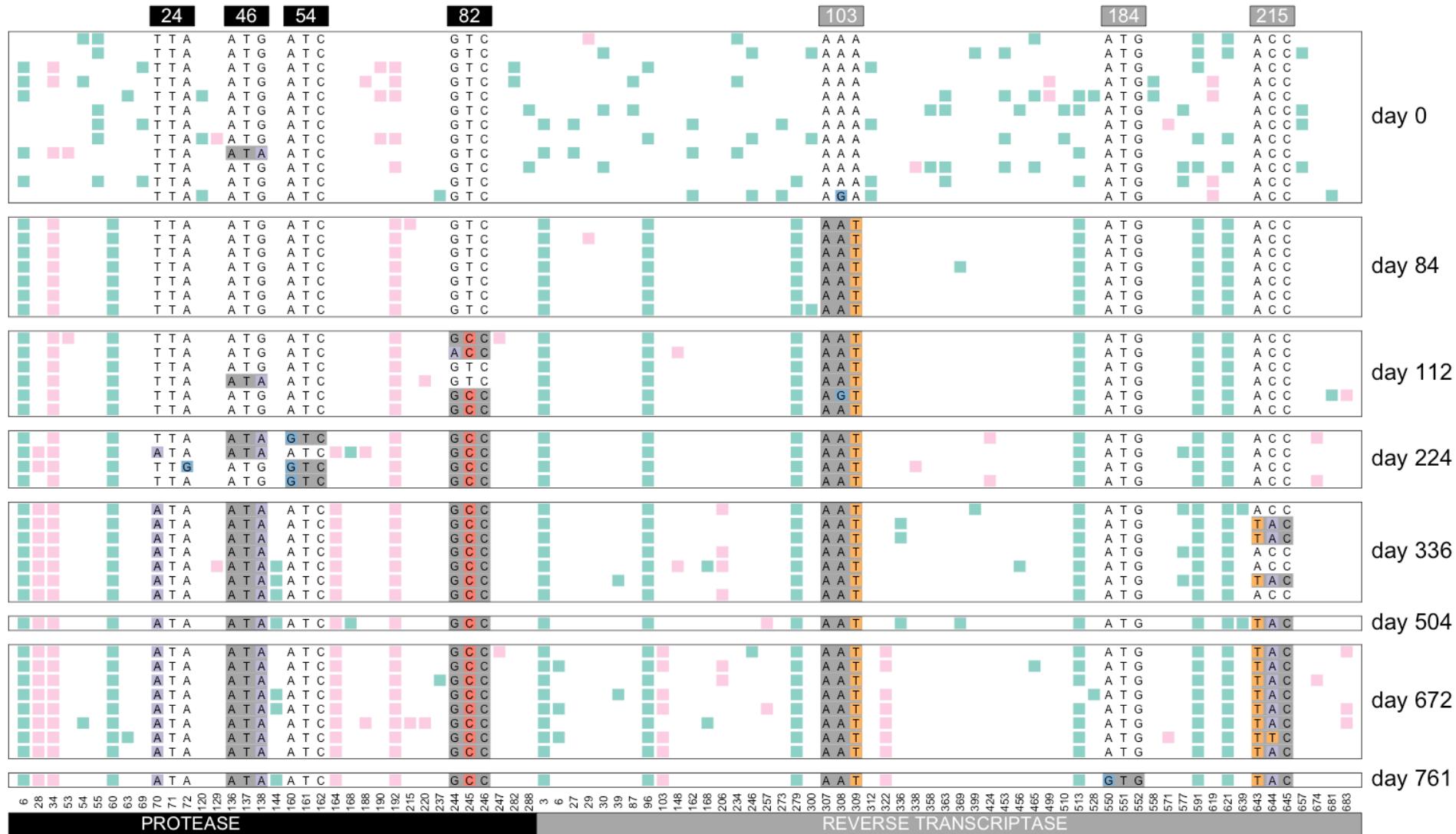
Viral sequences from patient 073

(likely treated with indinavir + efavirenz)



Viral sequences from patient 077

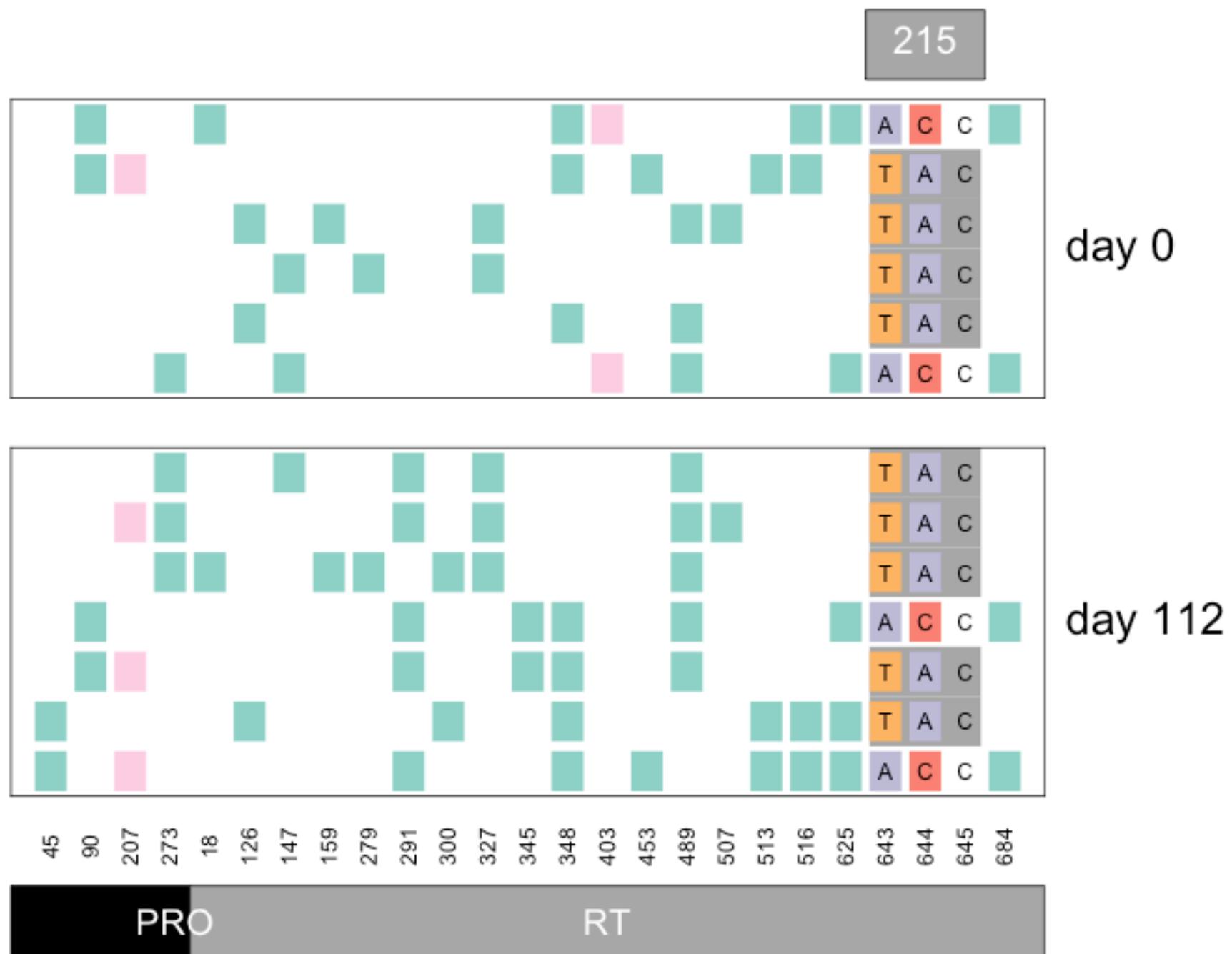
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

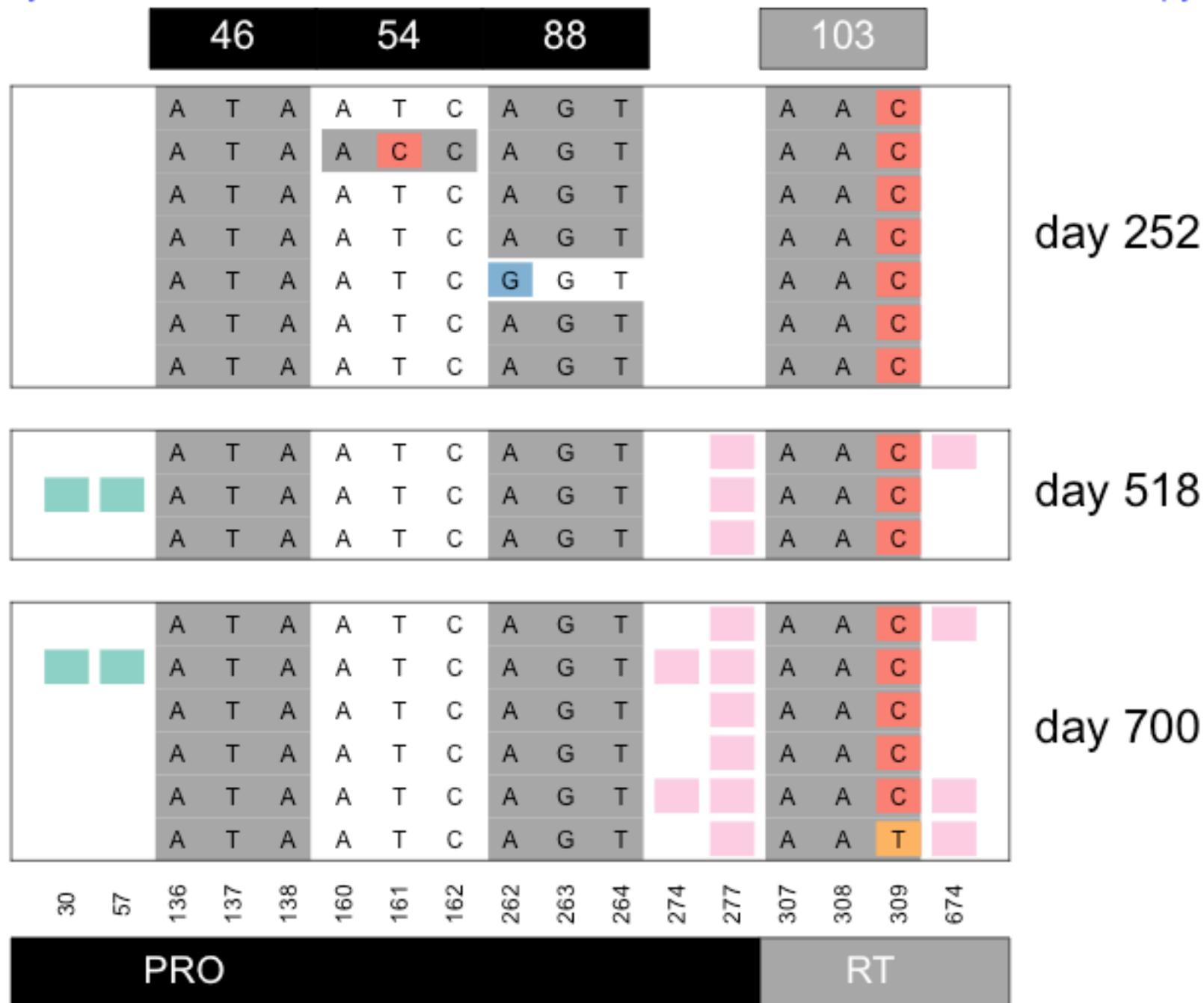
Viral sequences from patient 079

(likely treated with indinavir + efavirenz)



Viral sequences from patient 080

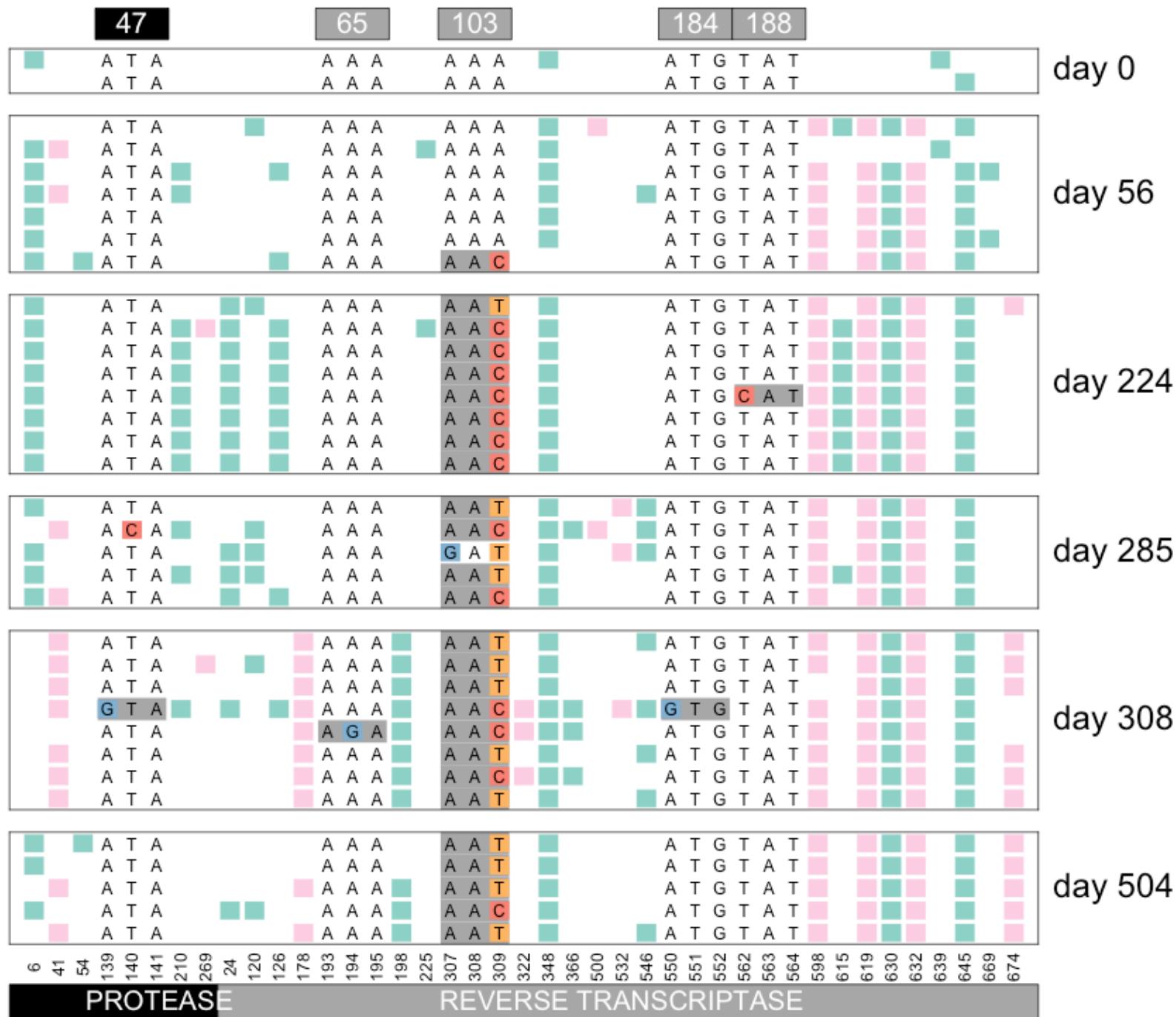
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

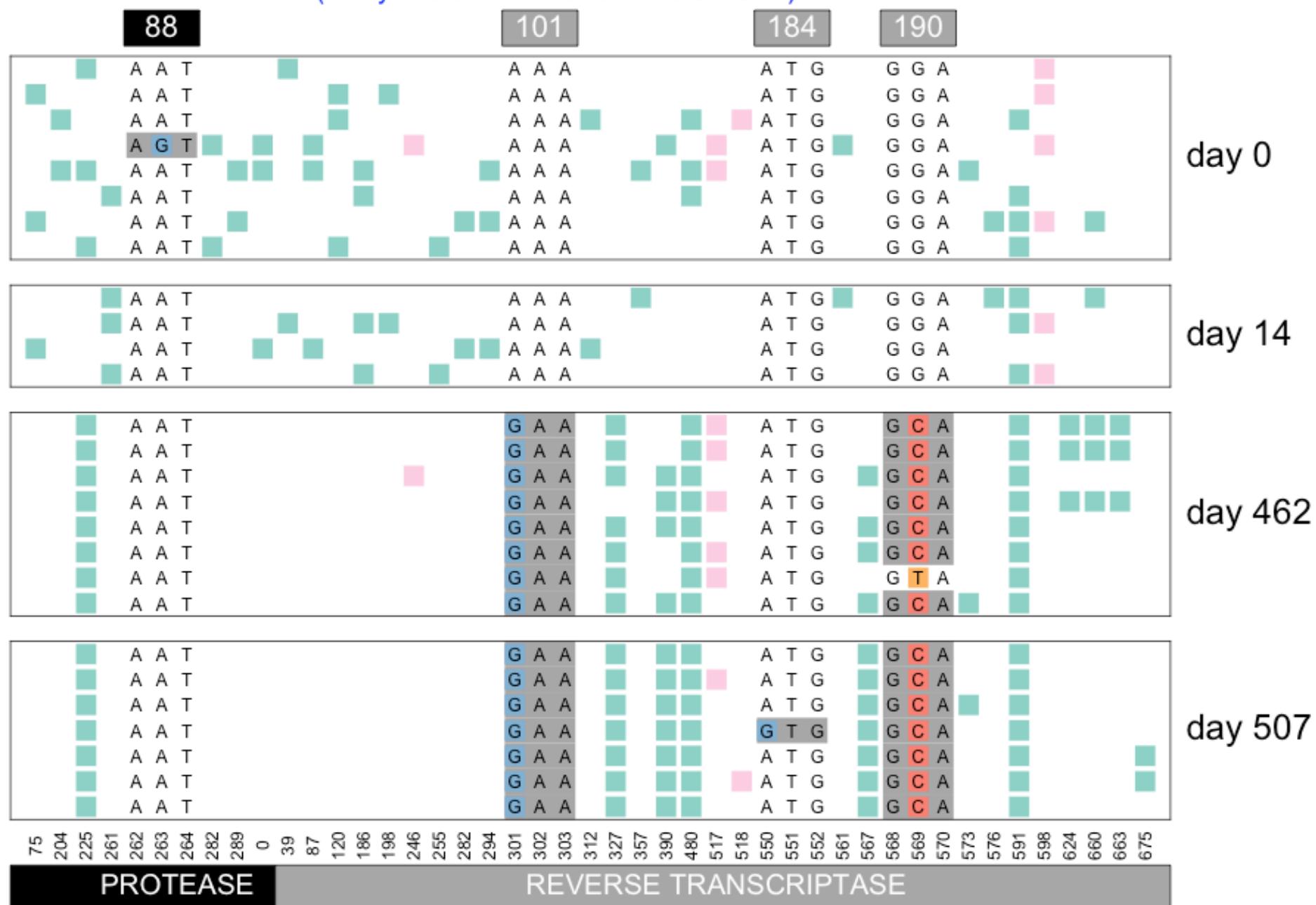
Viral sequences from patient 081

(likely treated with indinavir + efavirenz)



Viral sequences from patient 083

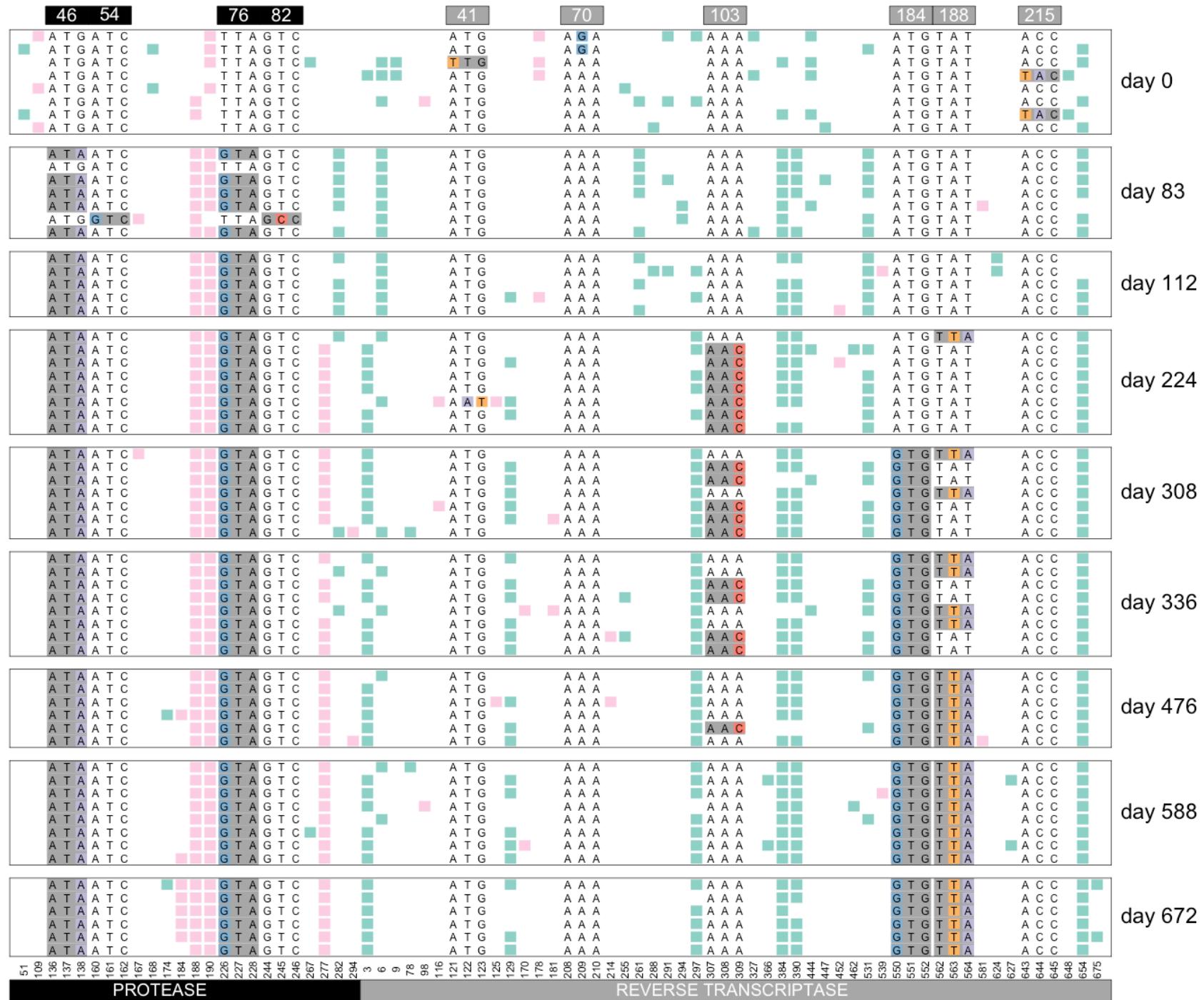
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

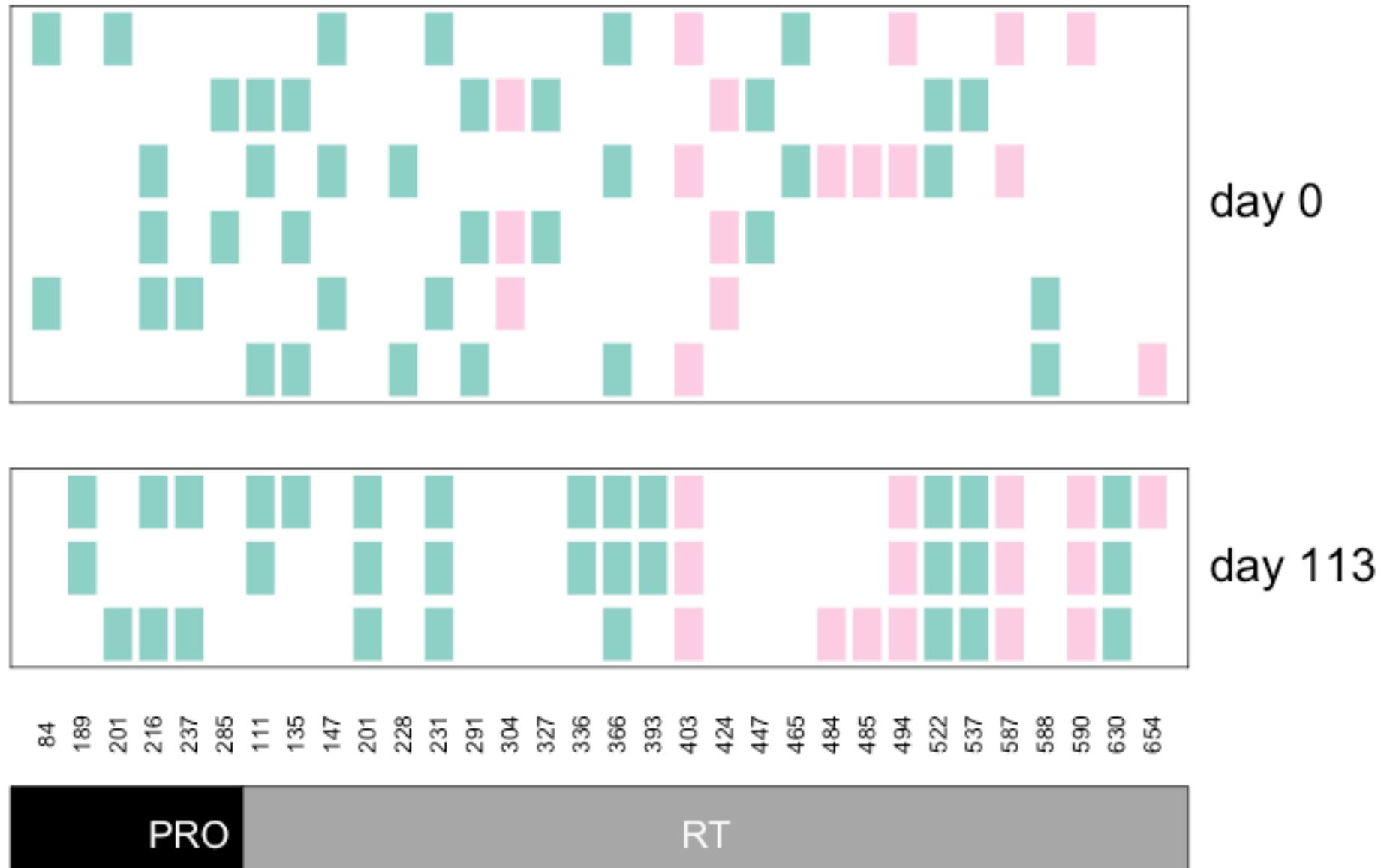
Viral sequences from patient 084

(likely treated with indinavir then later switched to efavirenz combination therapy)



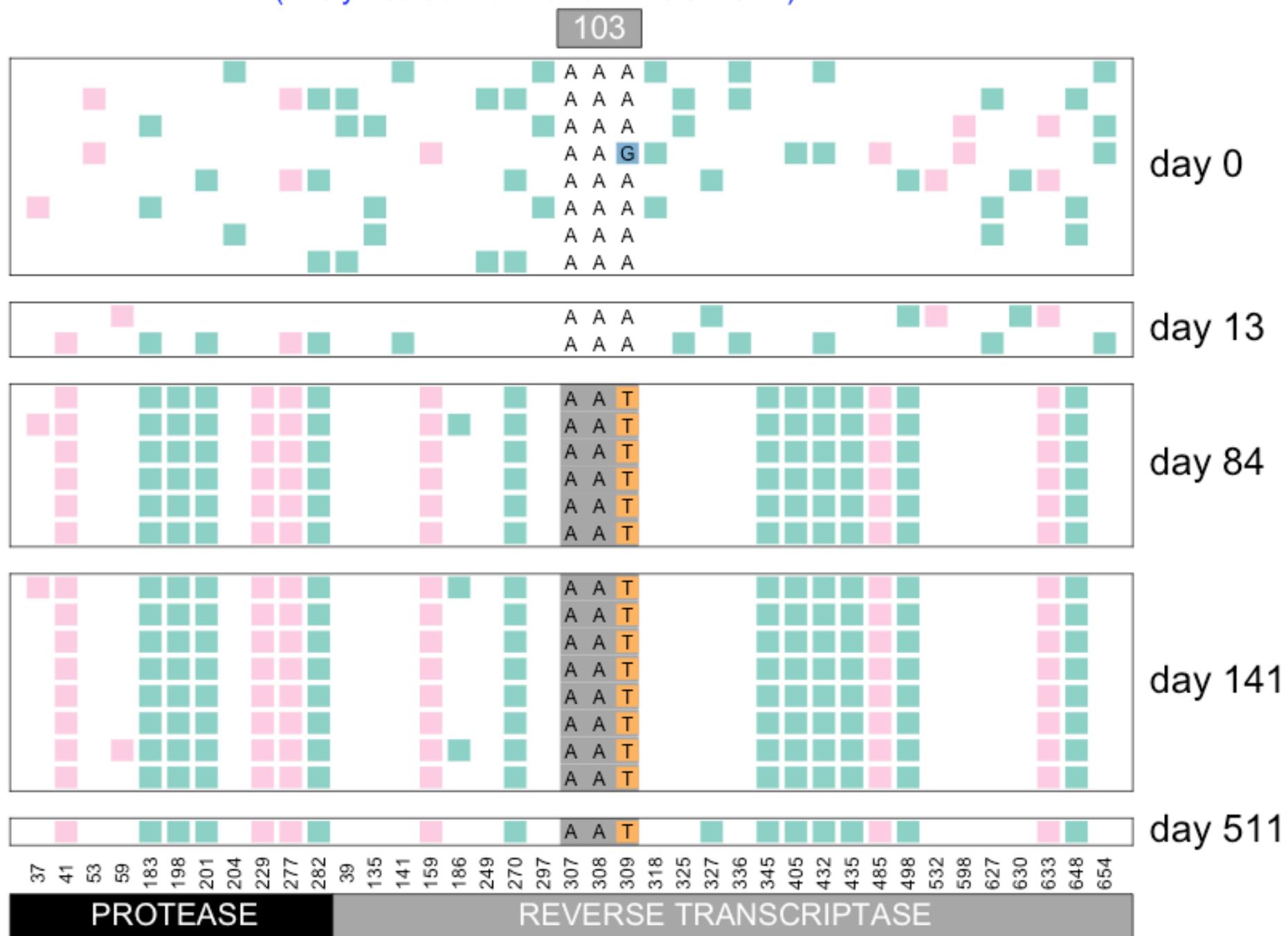
Viral sequences from patient 085

(likely treated with indinavir)



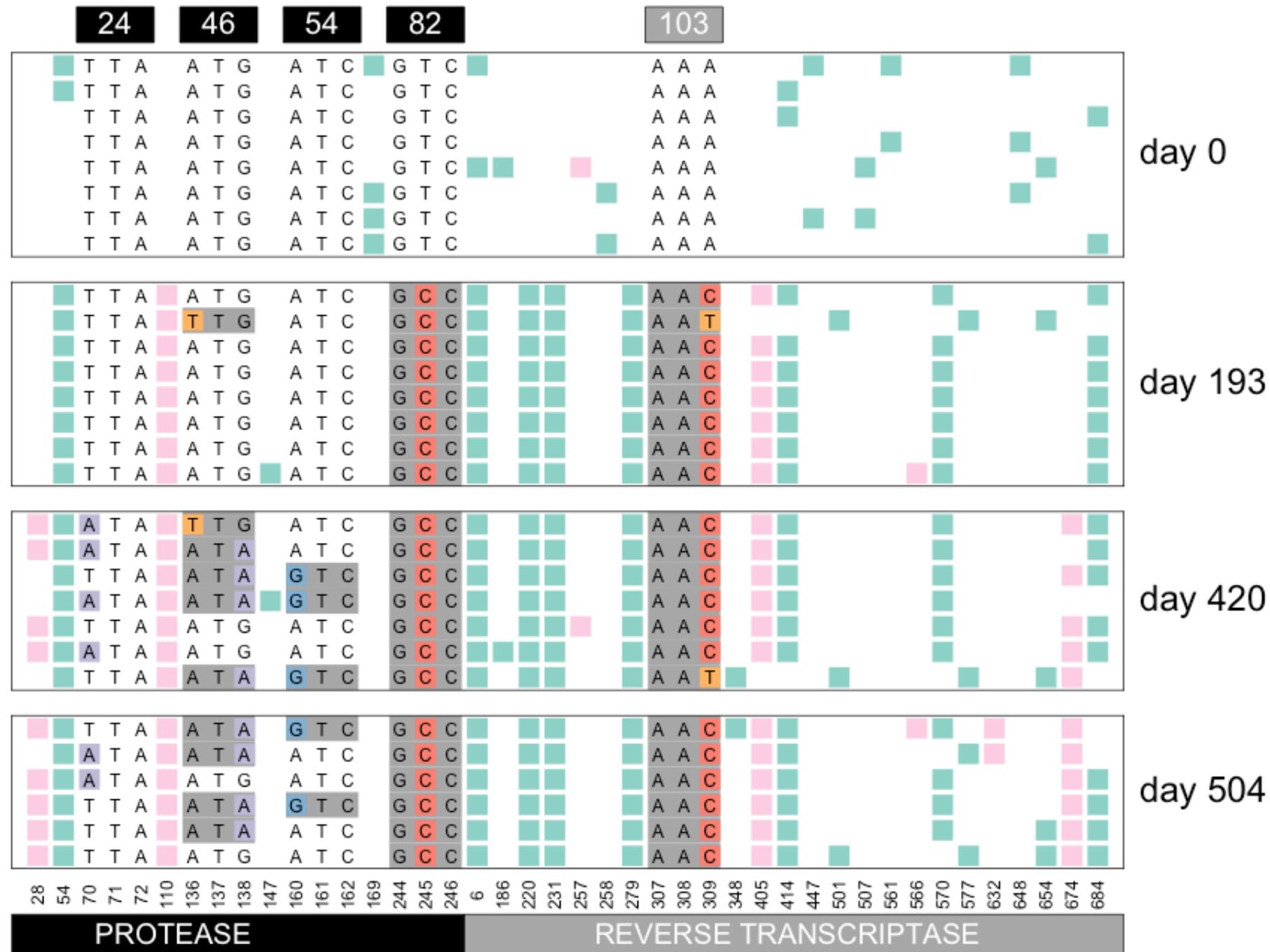
Viral sequences from patient 086

(likely treated with indinavir + efavirenz)



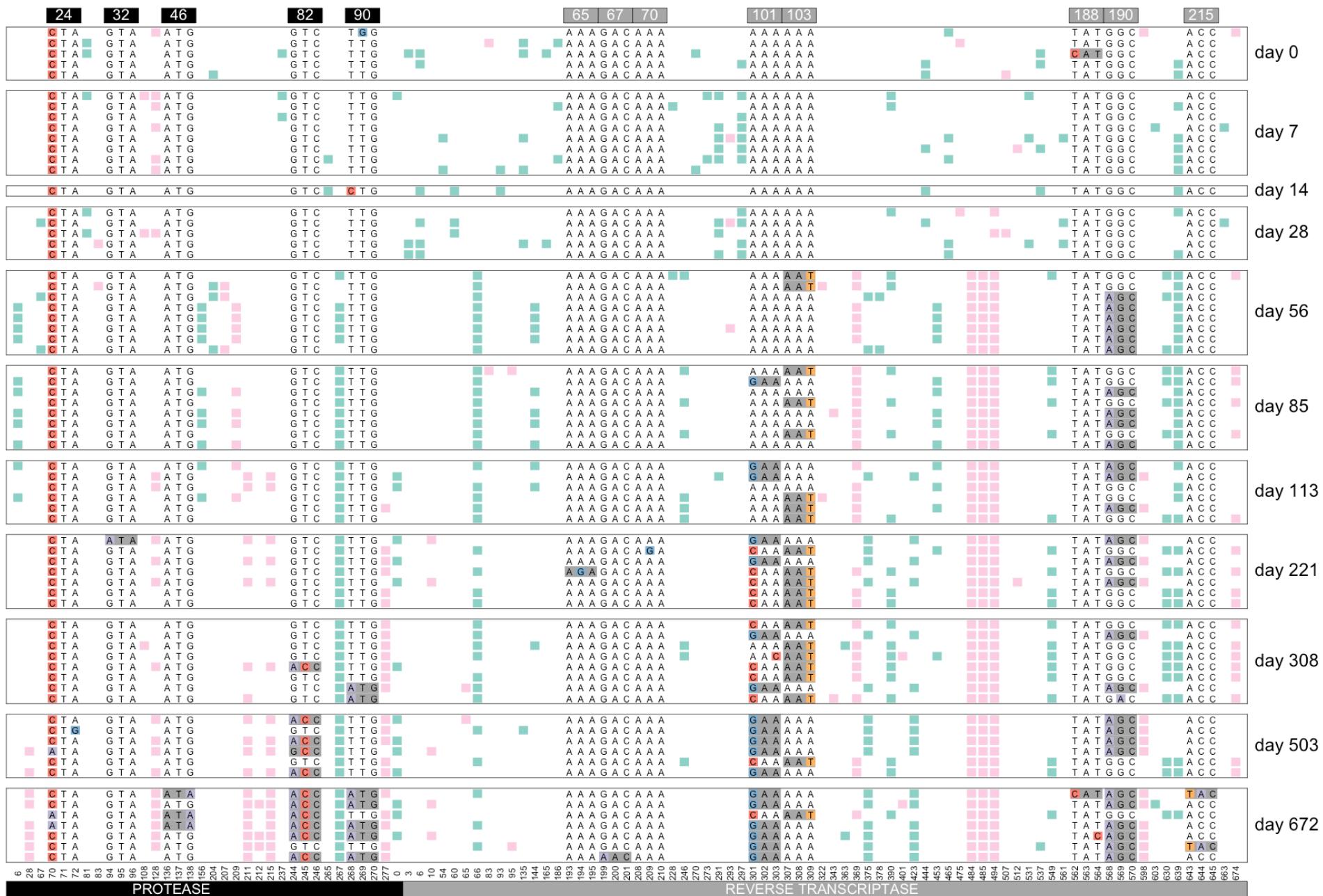
Viral sequences from patient 087

(likely treated with indinavir then later switched to efavirenz combination therapy)



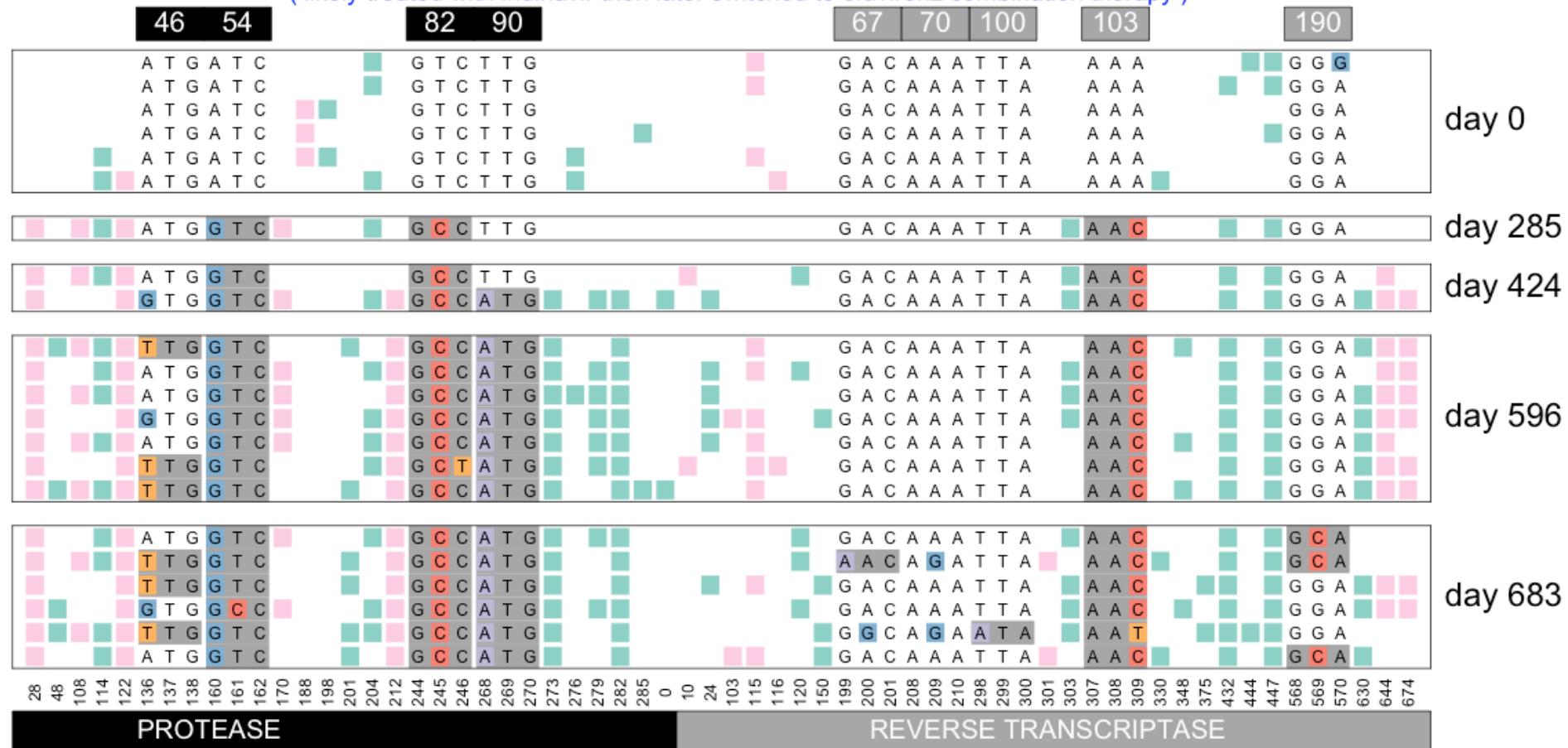
Viral sequences from patient 089

(likely treated with indinavir + efavirenz)



Viral sequences from patient 091

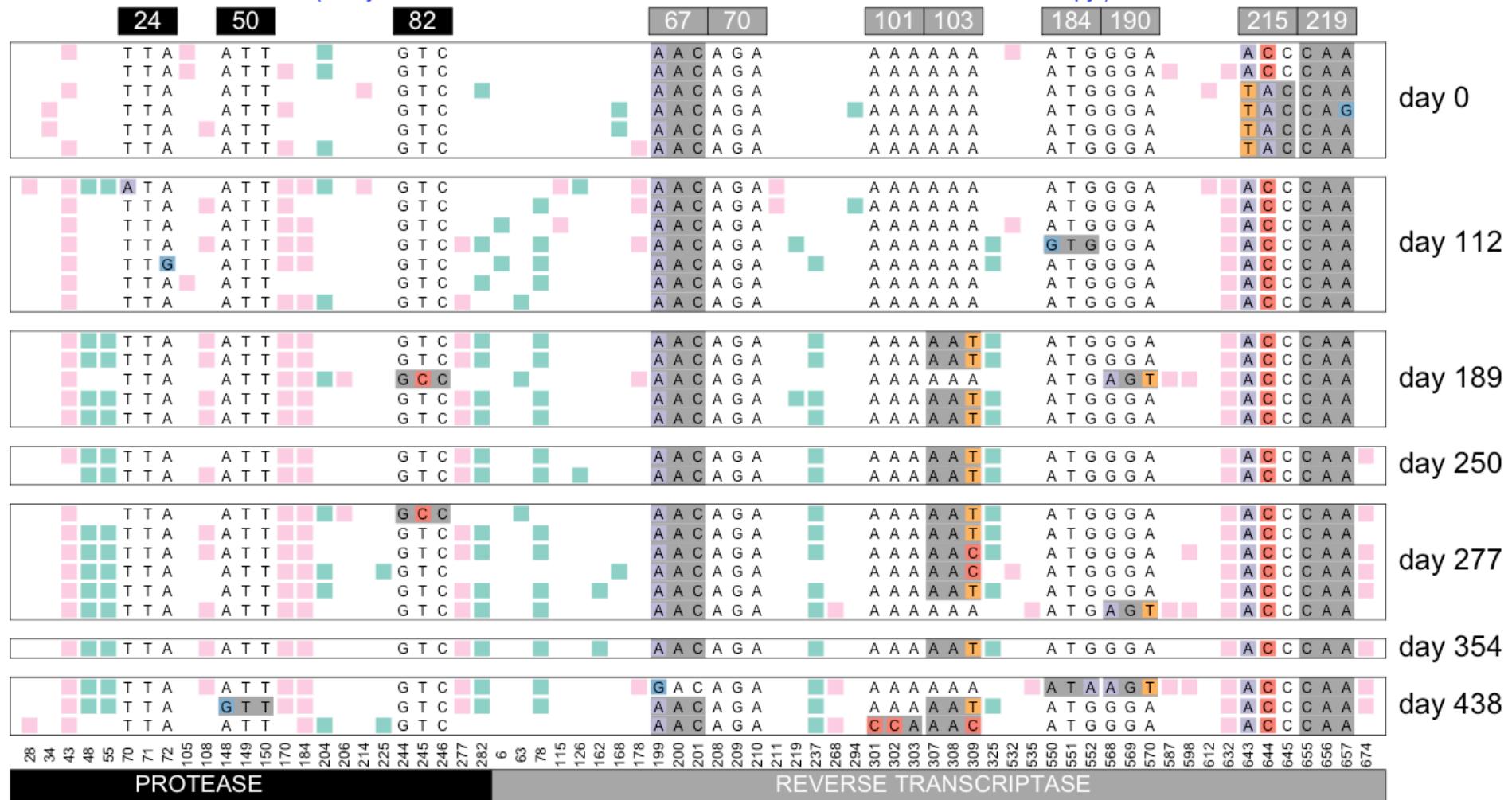
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 093

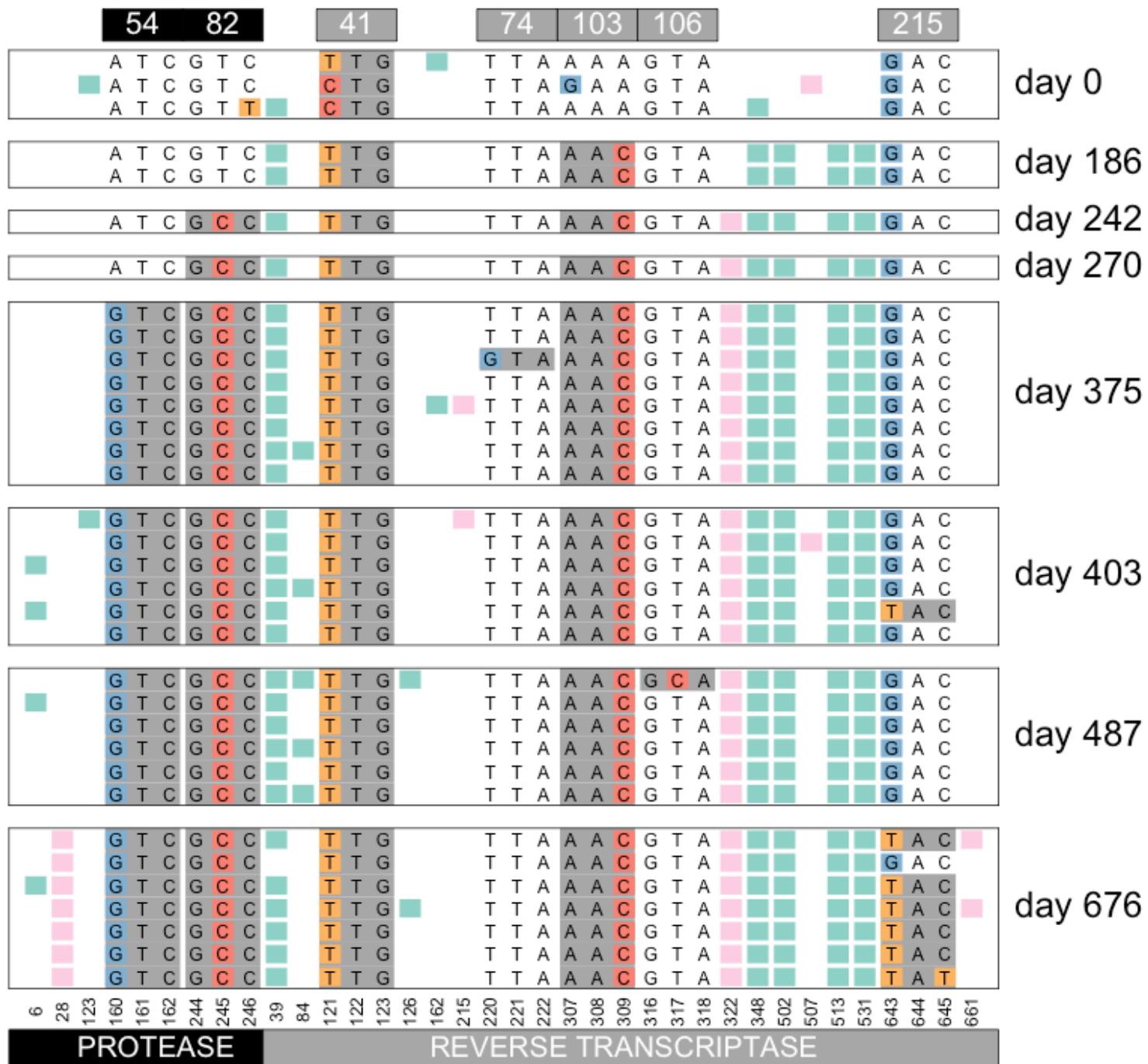
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

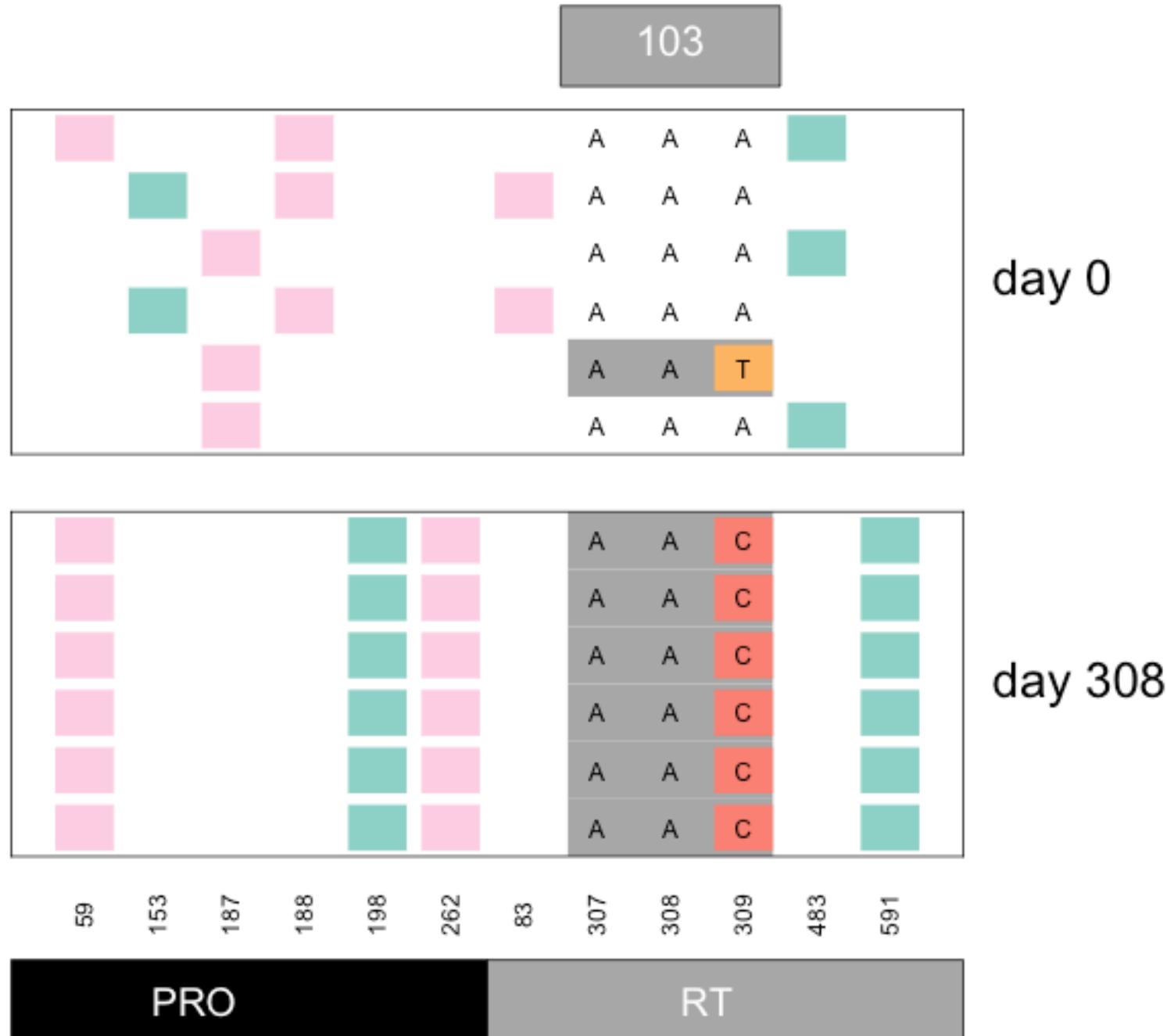
Viral sequences from patient 094

(likely treated with indinavir + efavirenz)



Viral sequences from patient 095

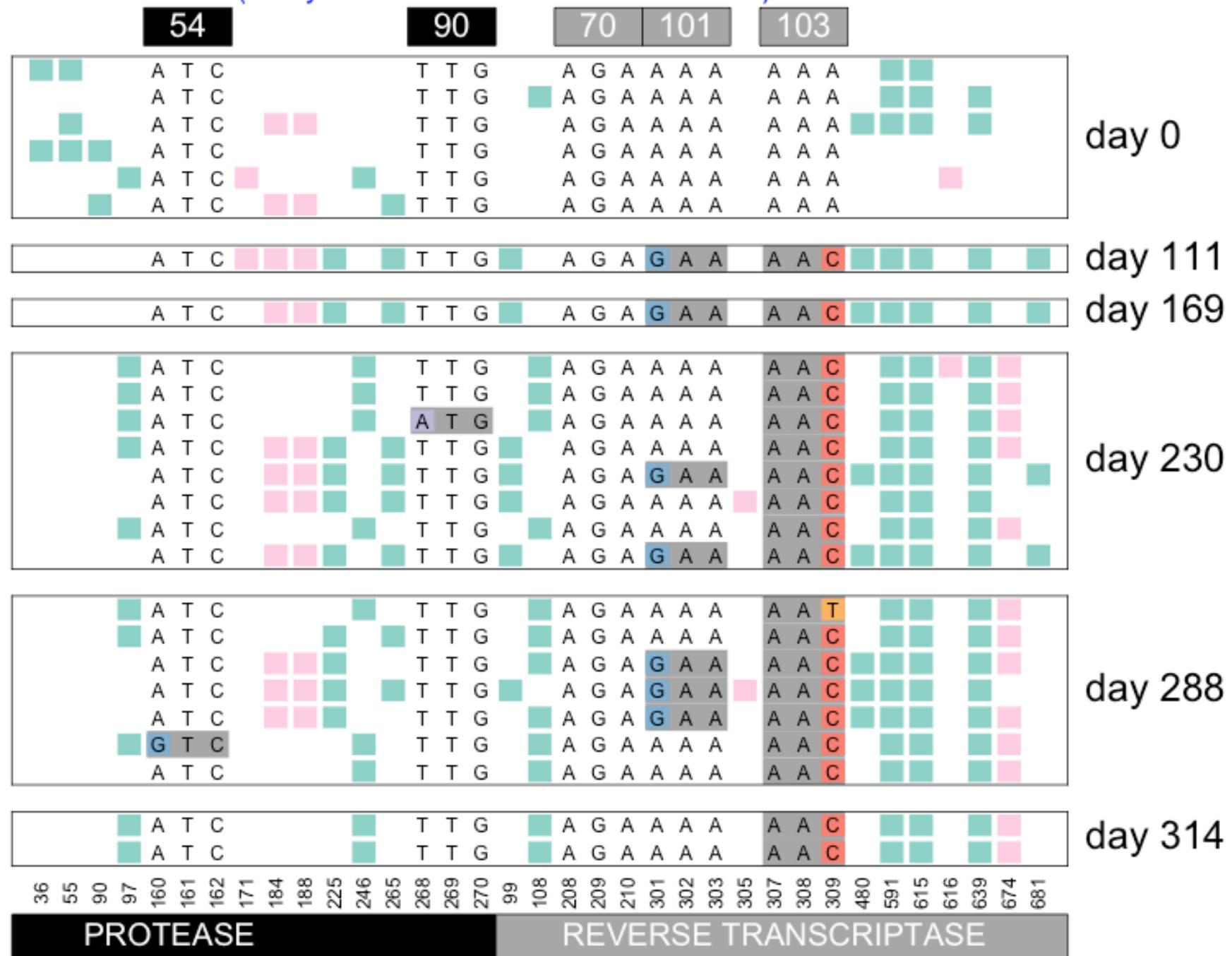
(likely treated with indinavir then later switched to efavirenz combination therapy)



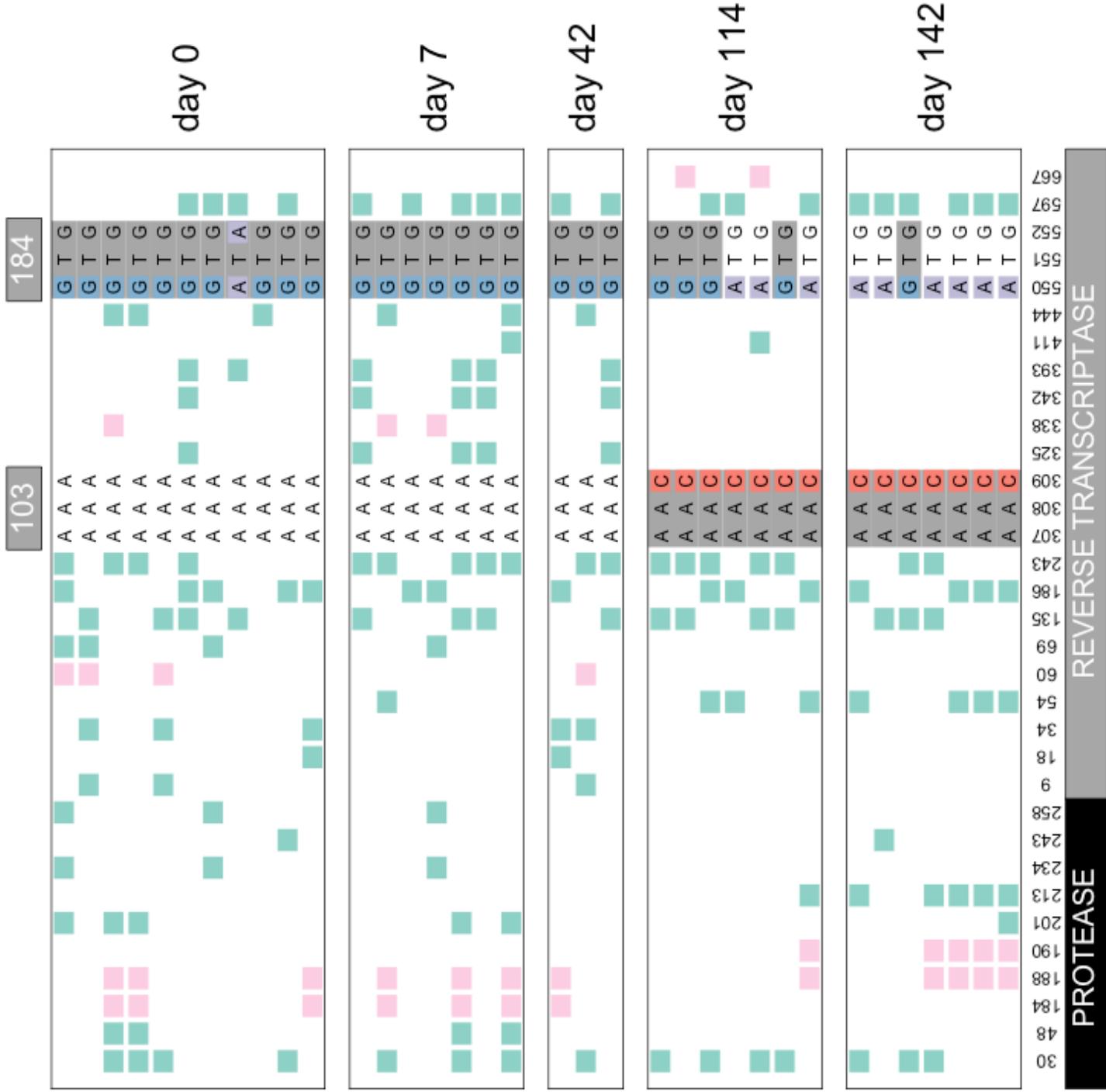
Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 098

(likely treated with indinavir + efavirenz)



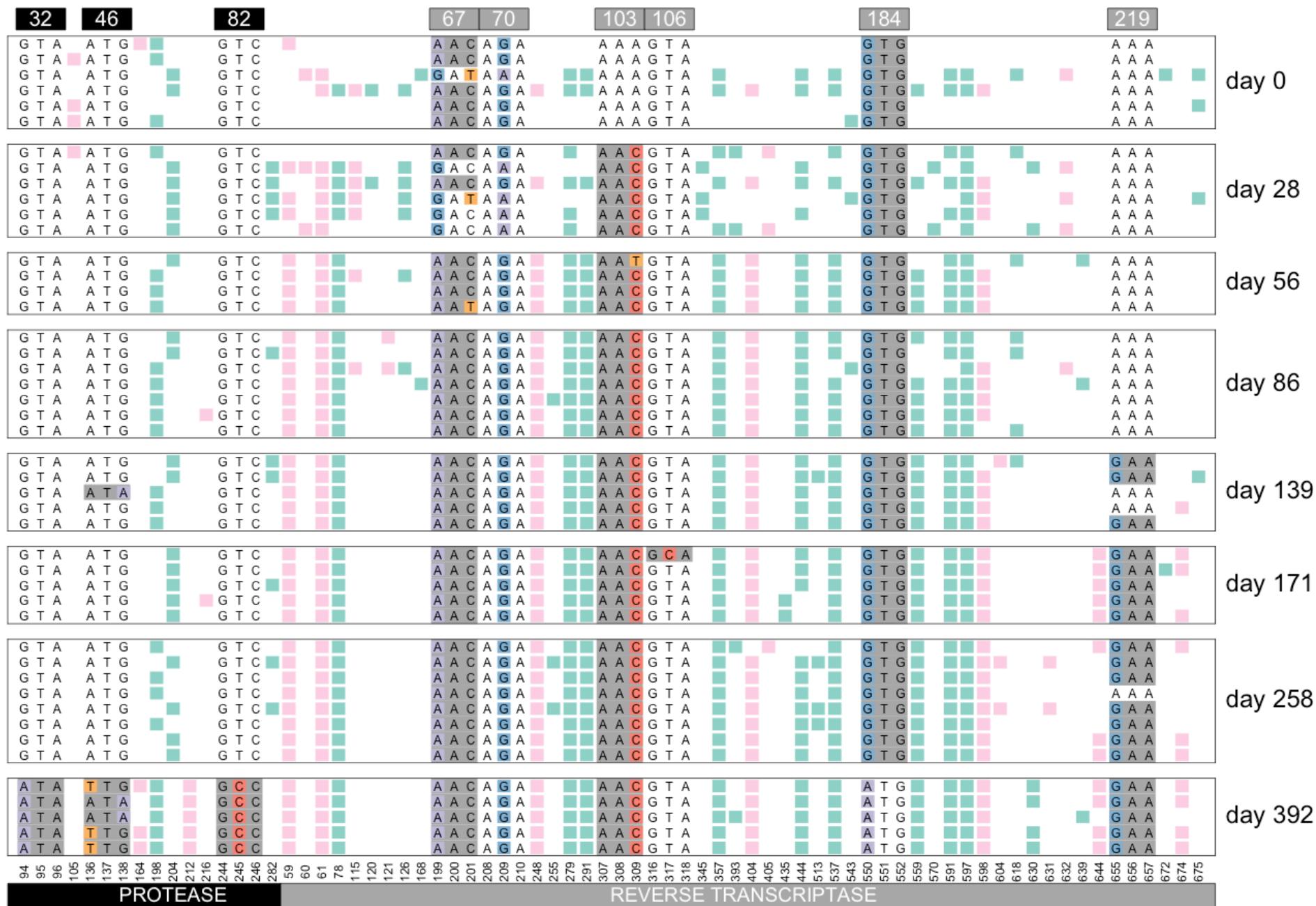
Viral sequences from patient 099 (likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

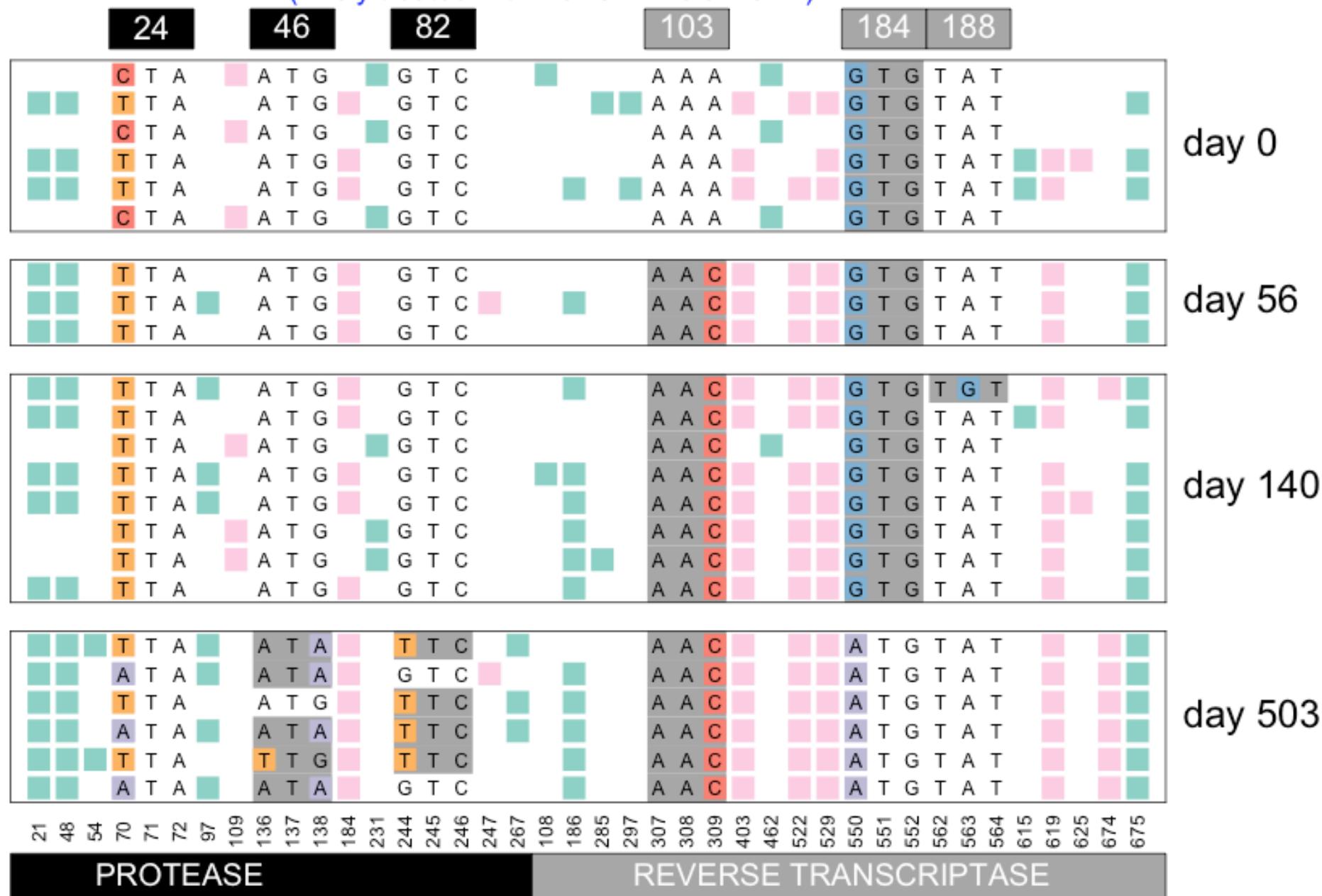
Viral sequences from patient 100

(likely treated with indinavir + efavirenz)



Viral sequences from patient 101

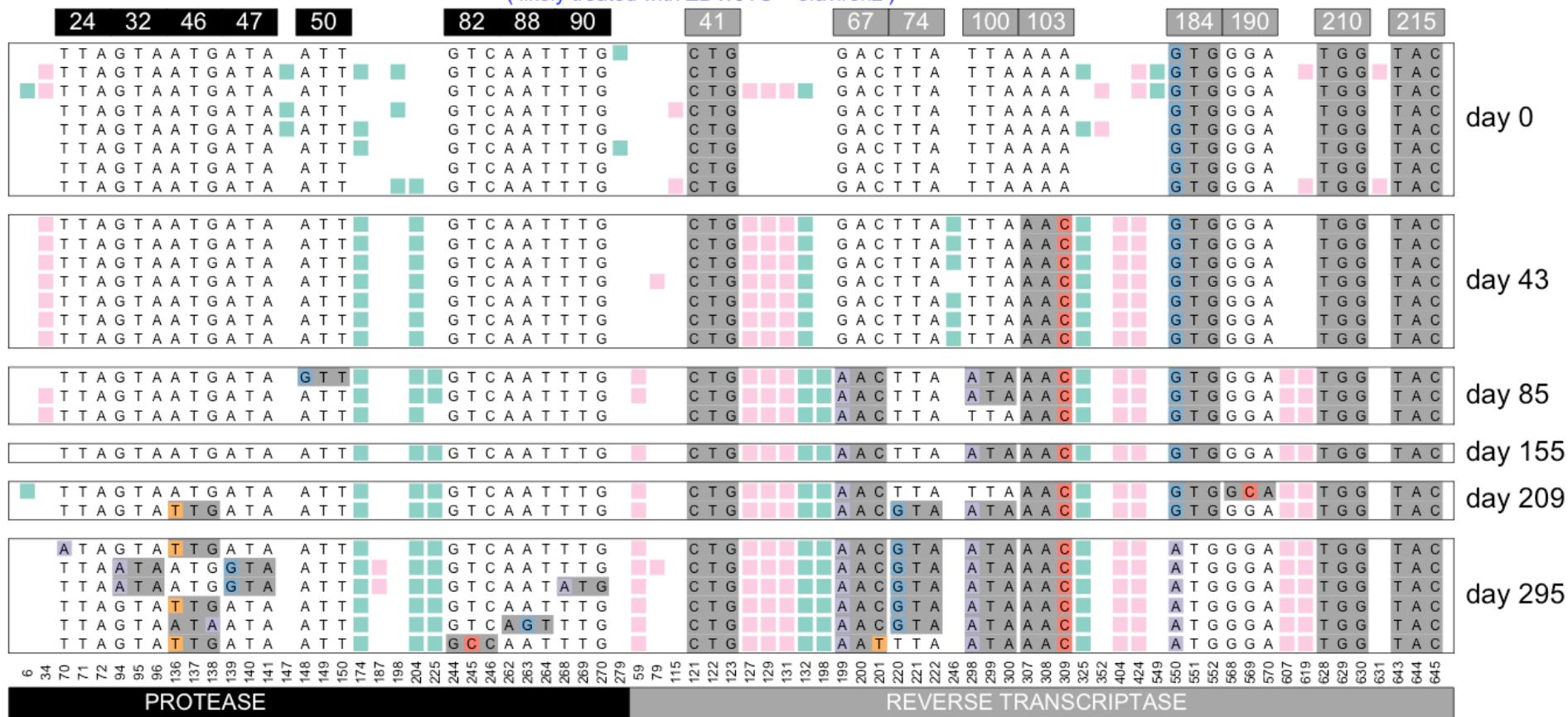
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 102

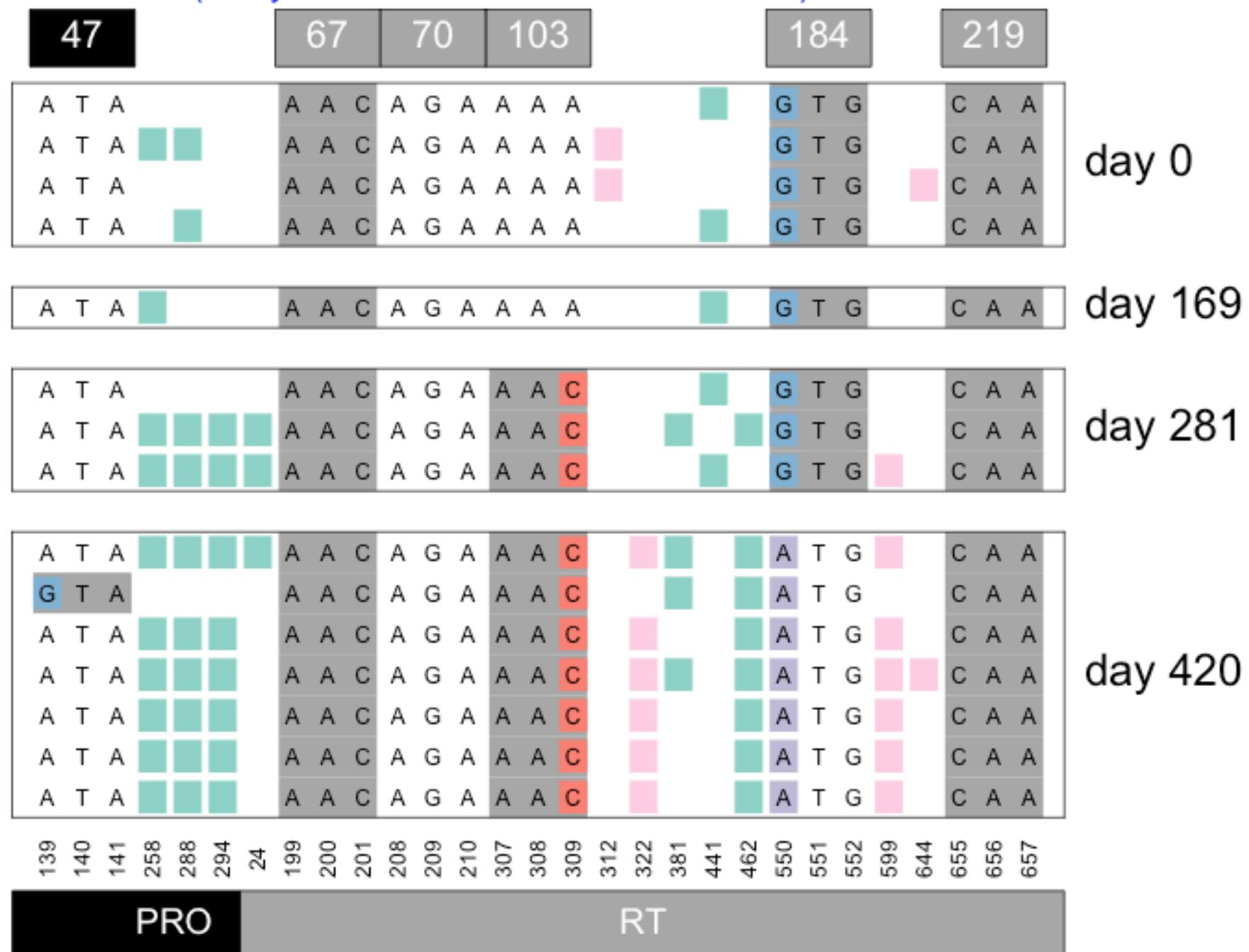
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 103

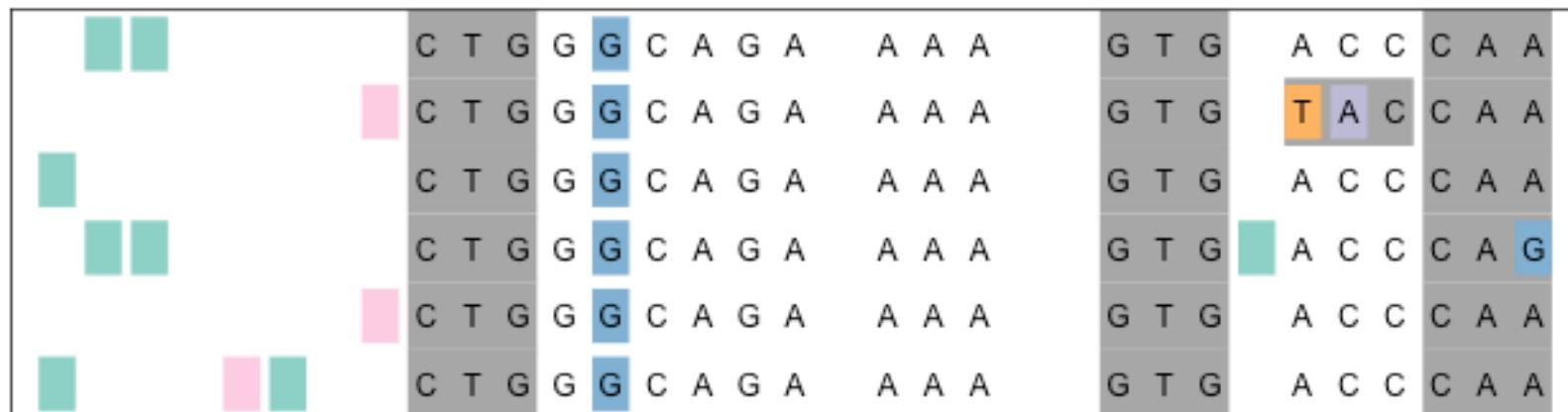
(likely treated with ZDV/3TC + efavirenz)



Viral sequences from patient 105

(likely treated with indinavir)

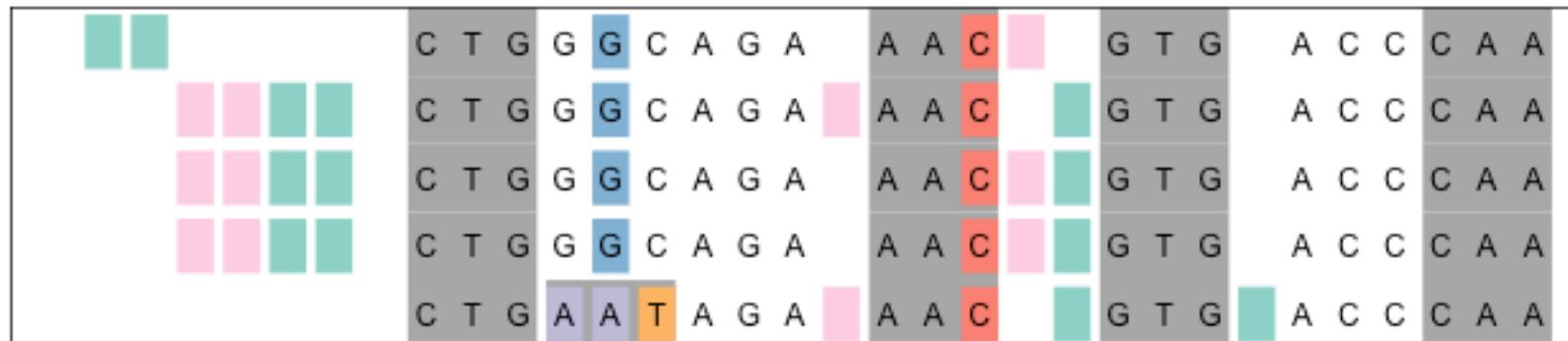
41	67	70	103	184	215	219
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day 0

day 84

day 168



6 30 42 109 170 180 36 79 121 122 123 199 200 201 208 209 210 301 307 308 309 322 486 550 551 552 582 643 644 645 655 656 657

PRO

RT

Williams, Pennings, 2018. Data from Bacheler et al 2000

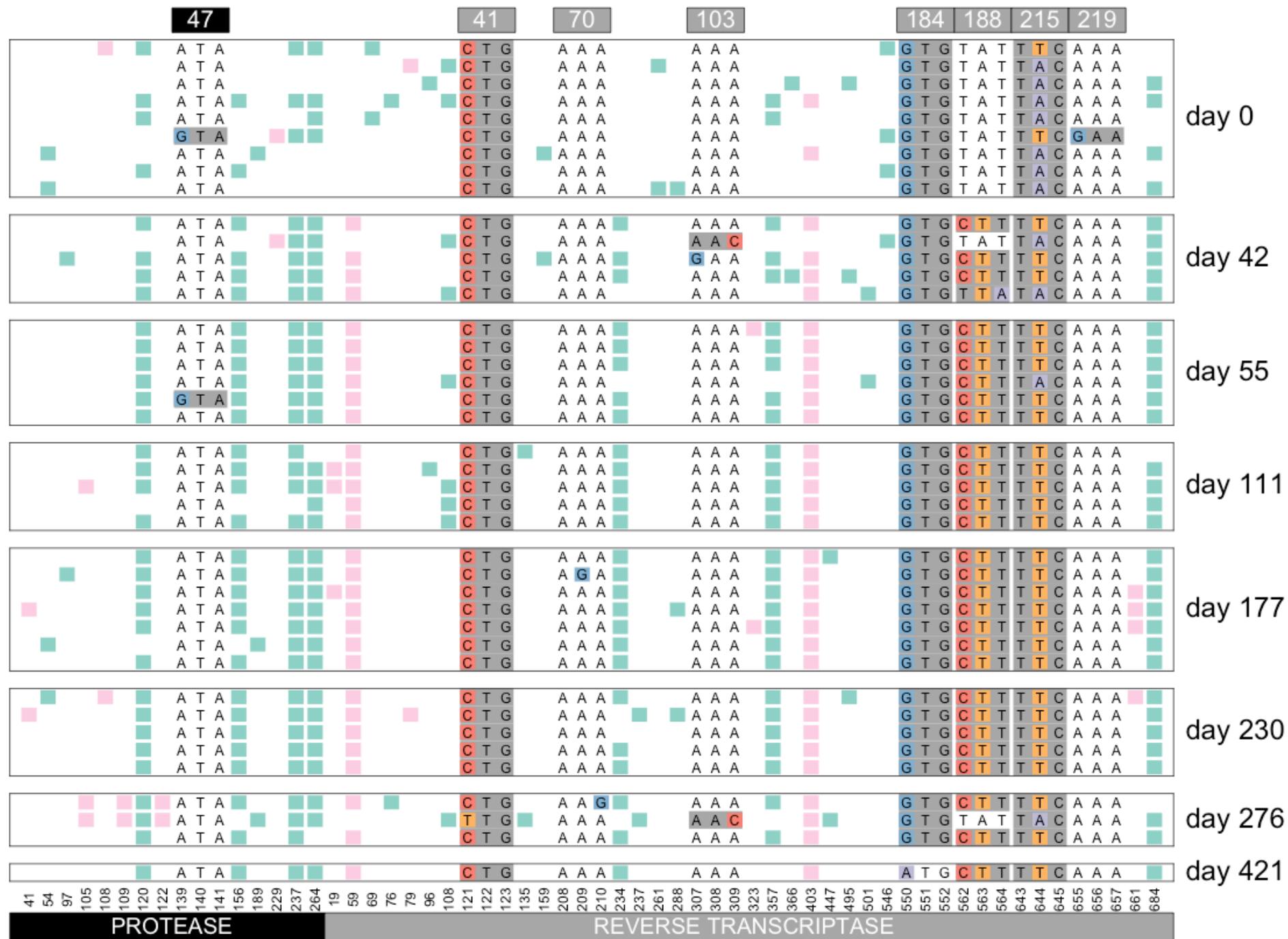
Viral sequences from patient 106
 (likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

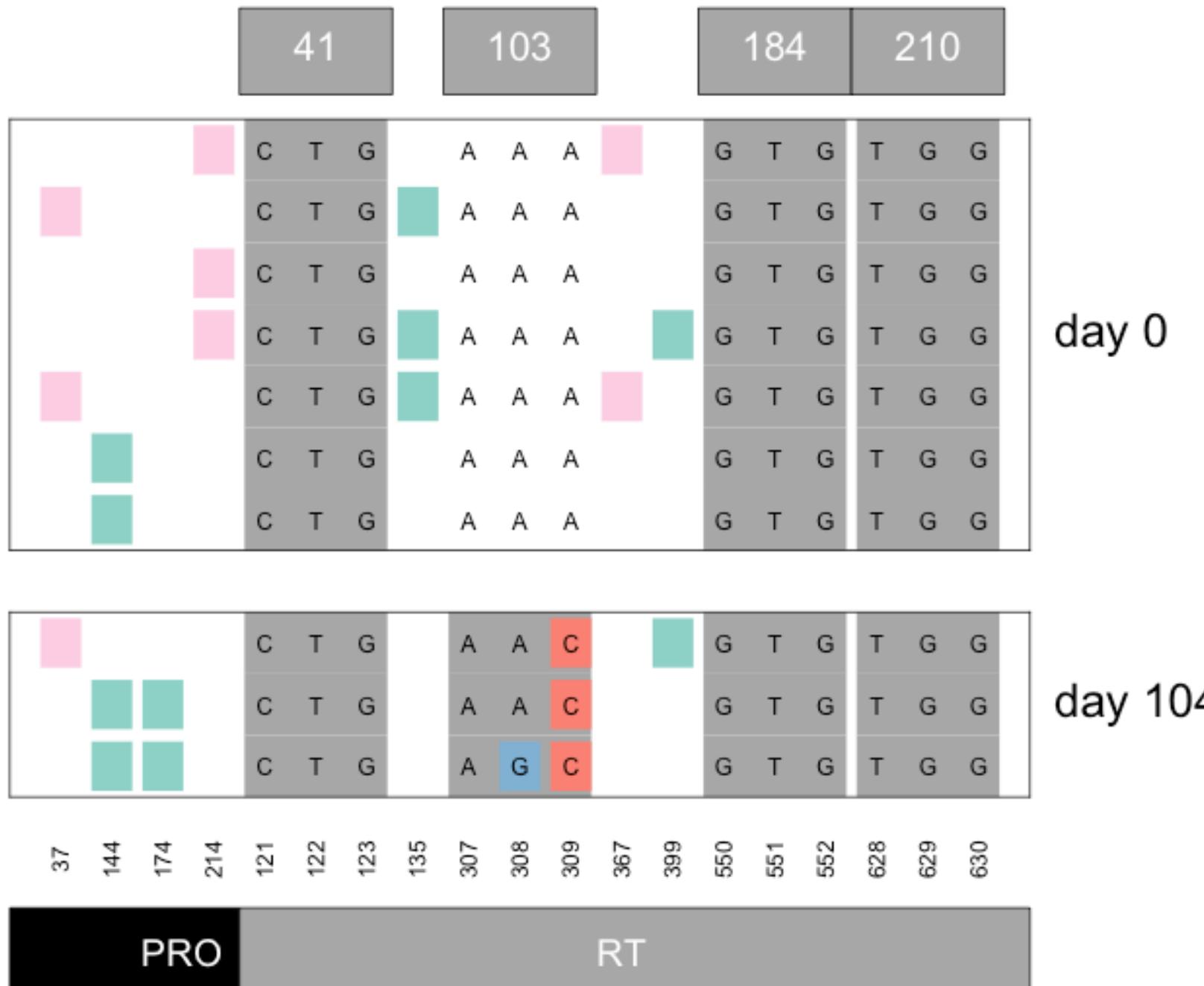
Viral sequences from patient 107

(likely treated with indinavir + efavirenz)



Viral sequences from patient 108

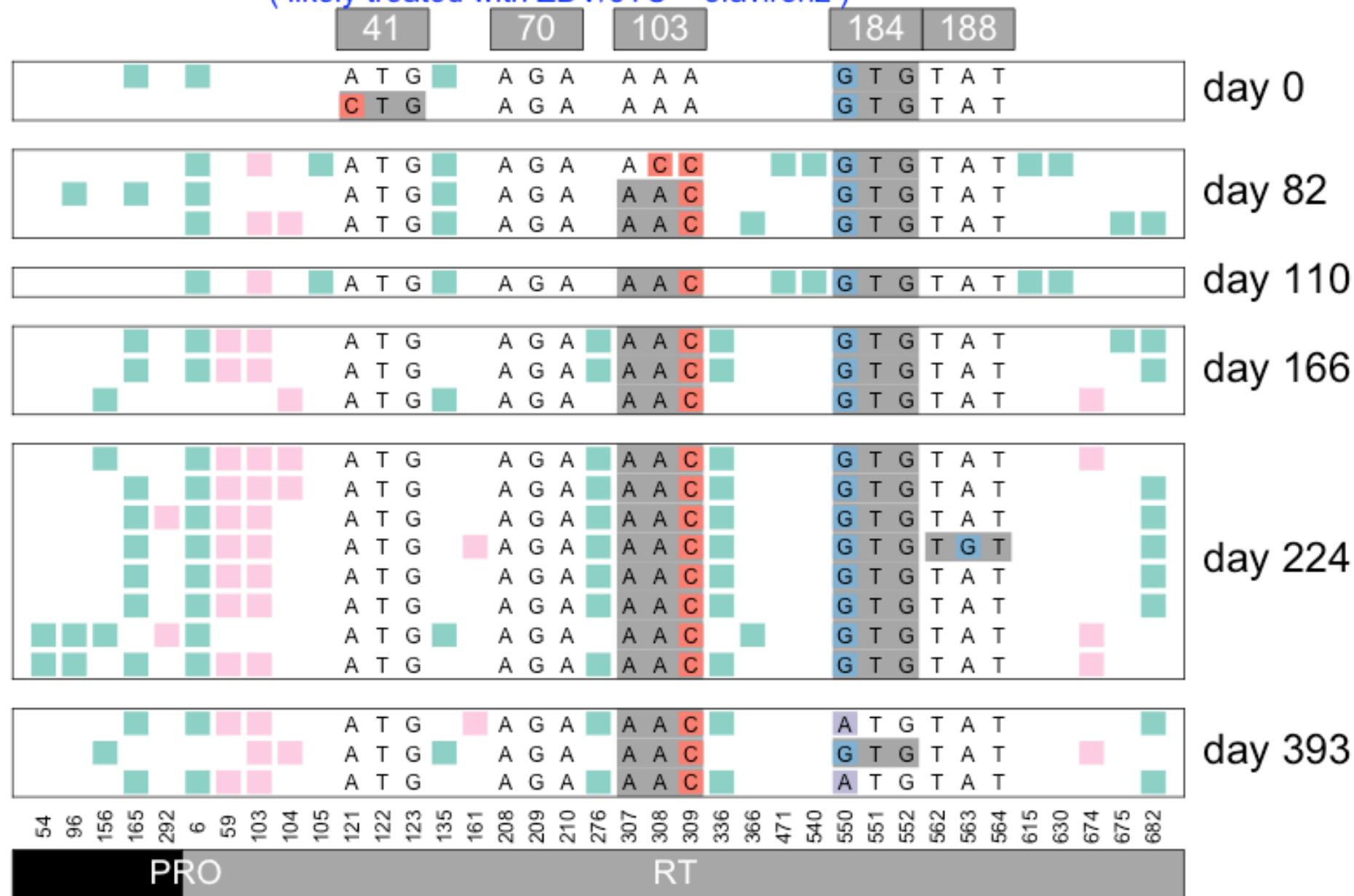
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 109

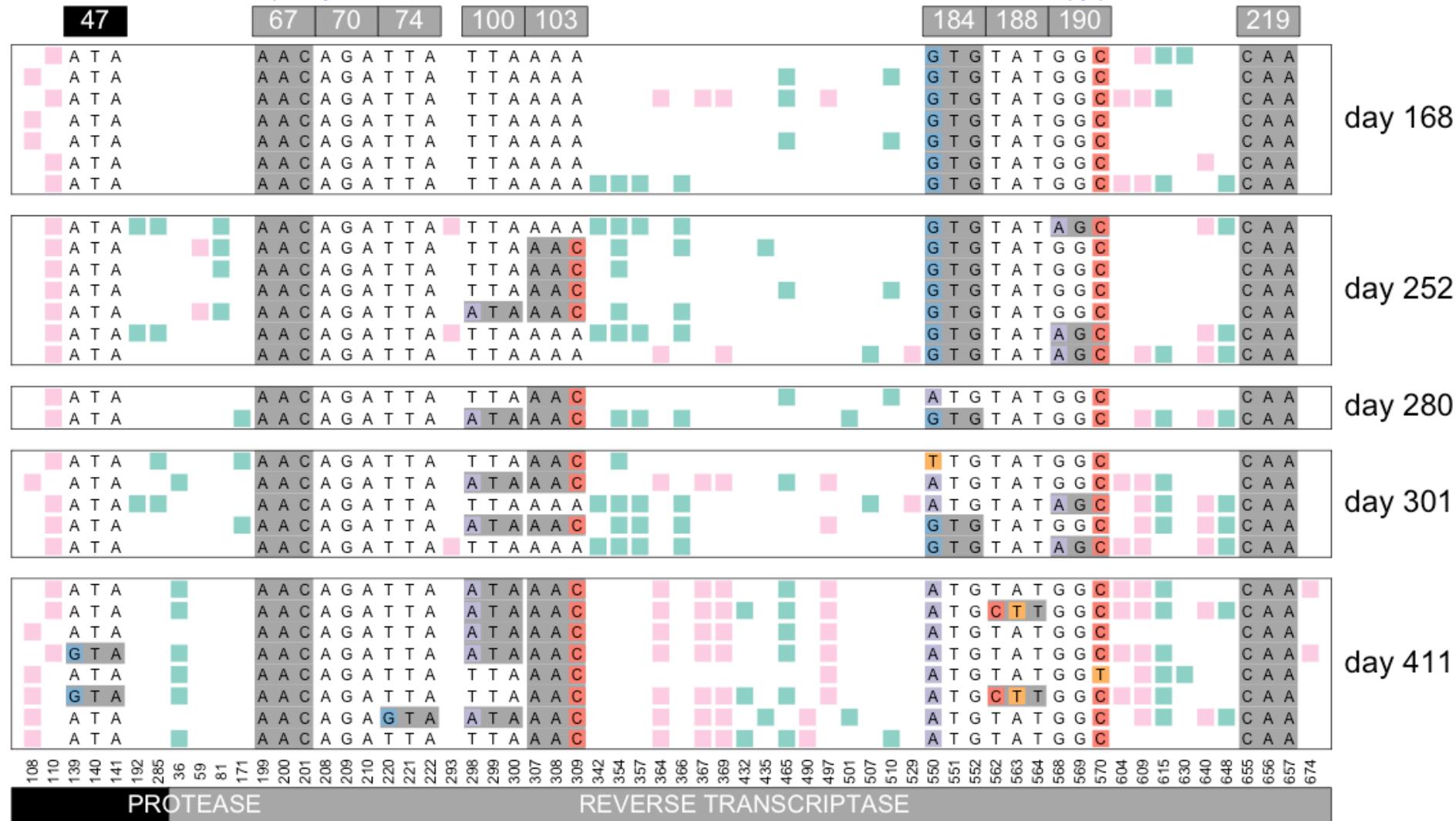
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 110

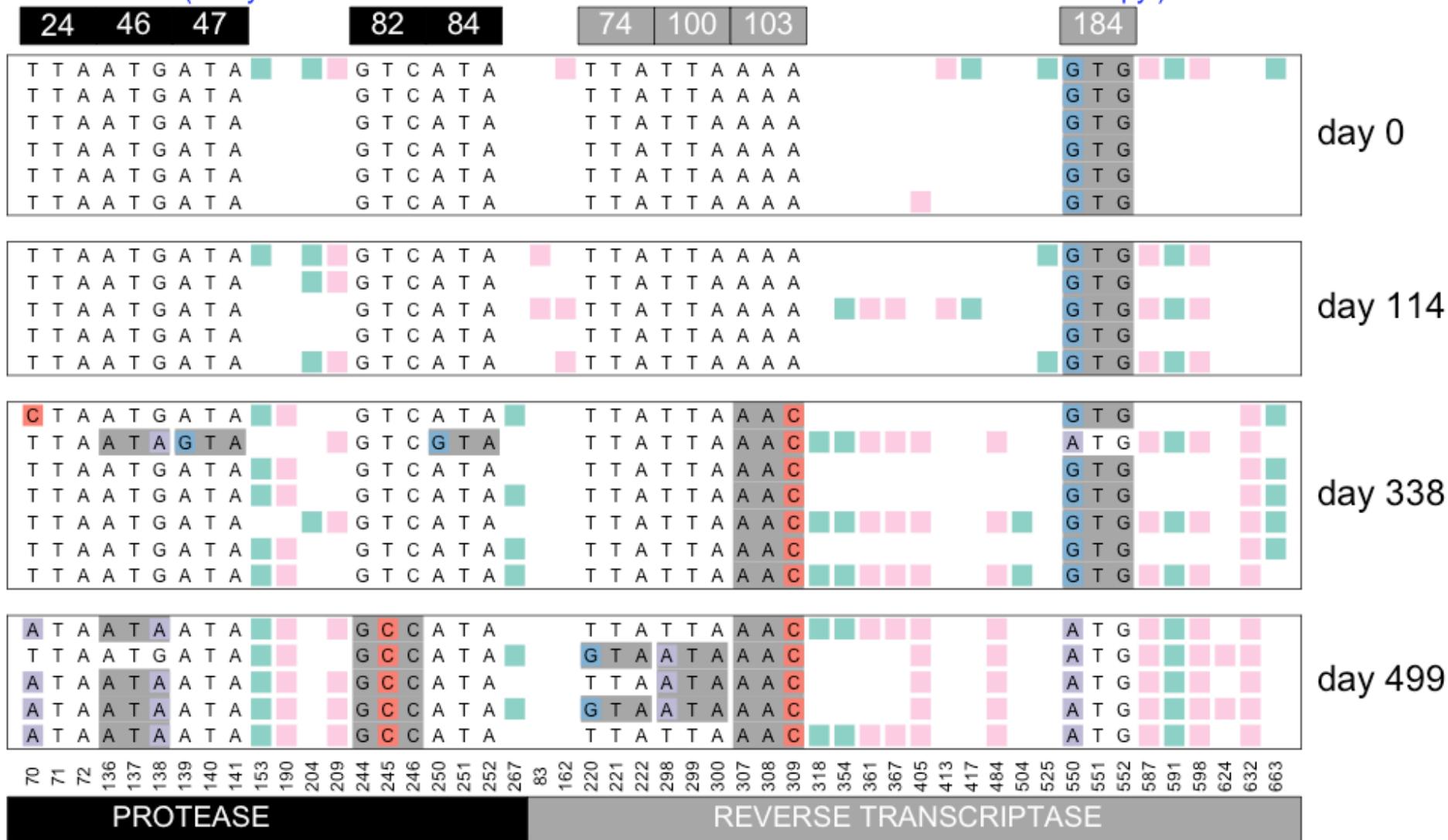
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 111

(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 112

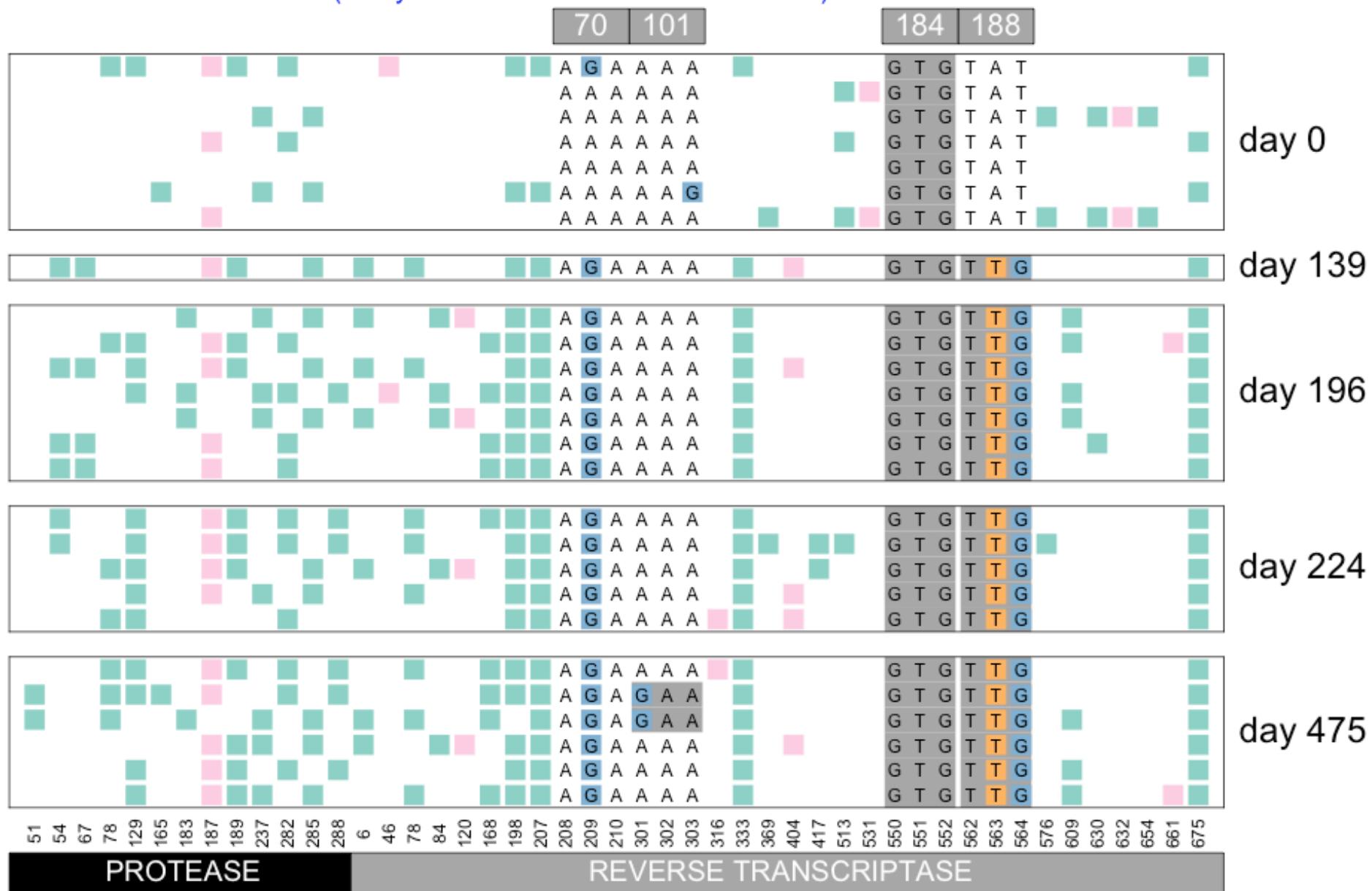
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 113

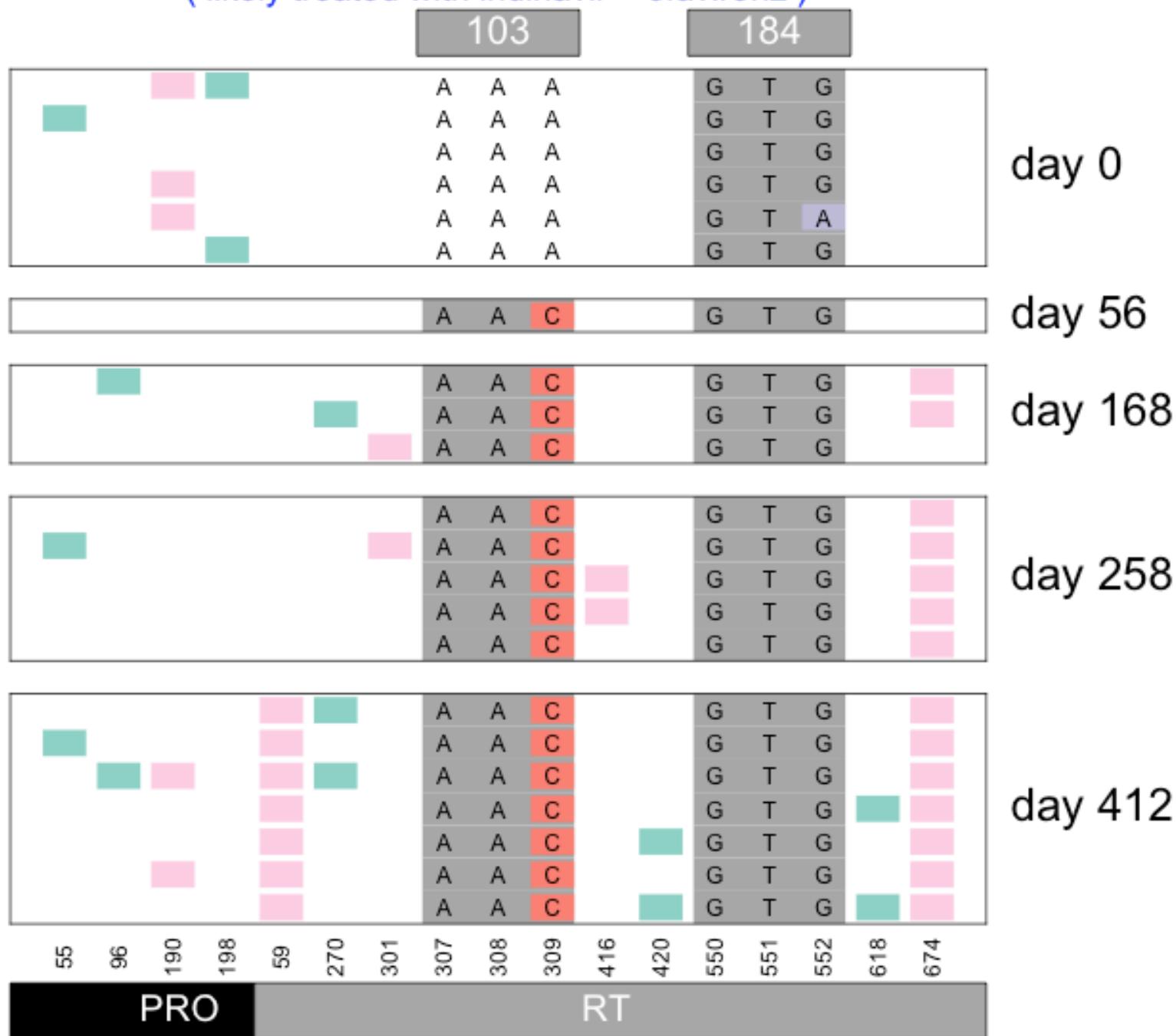
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 114

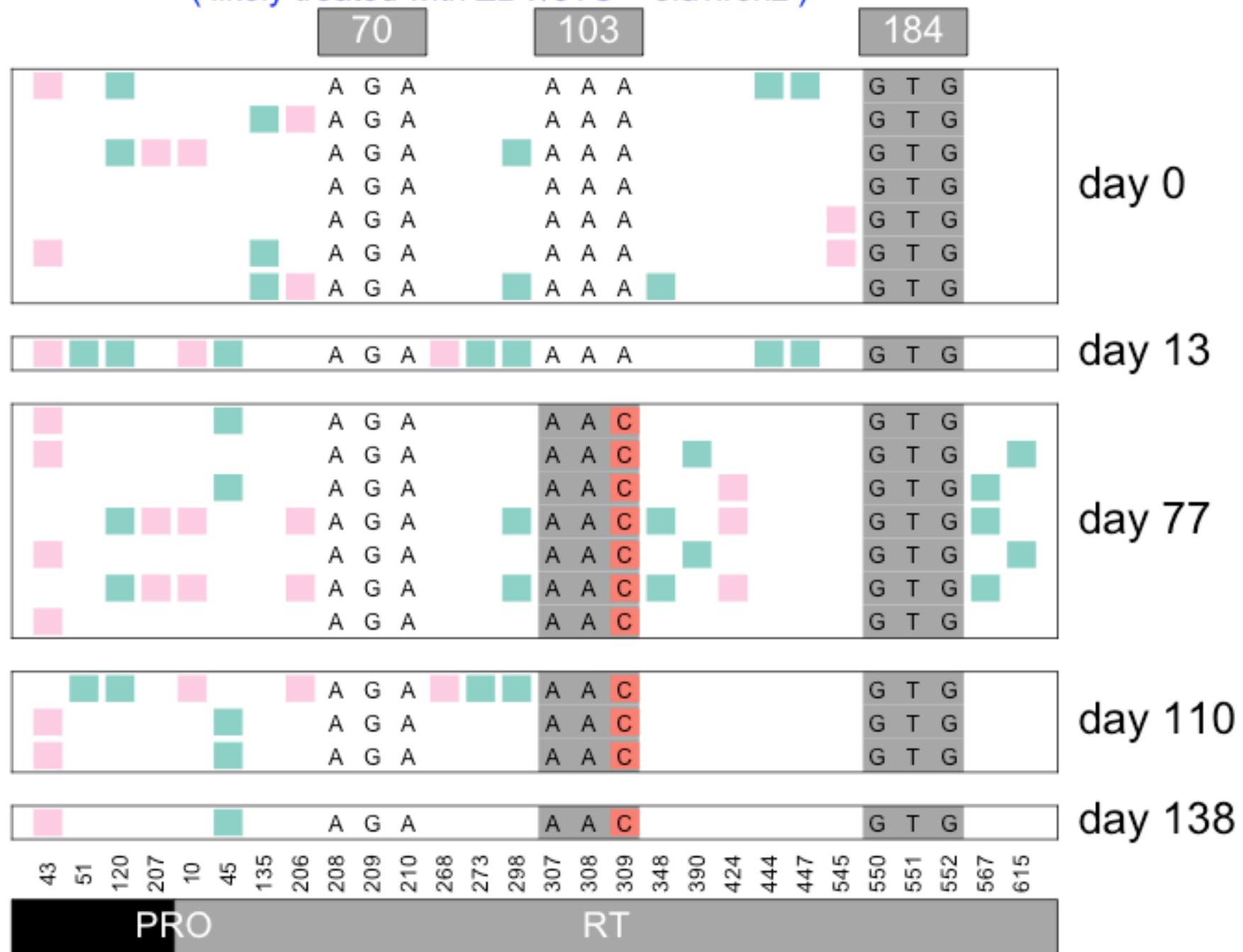
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

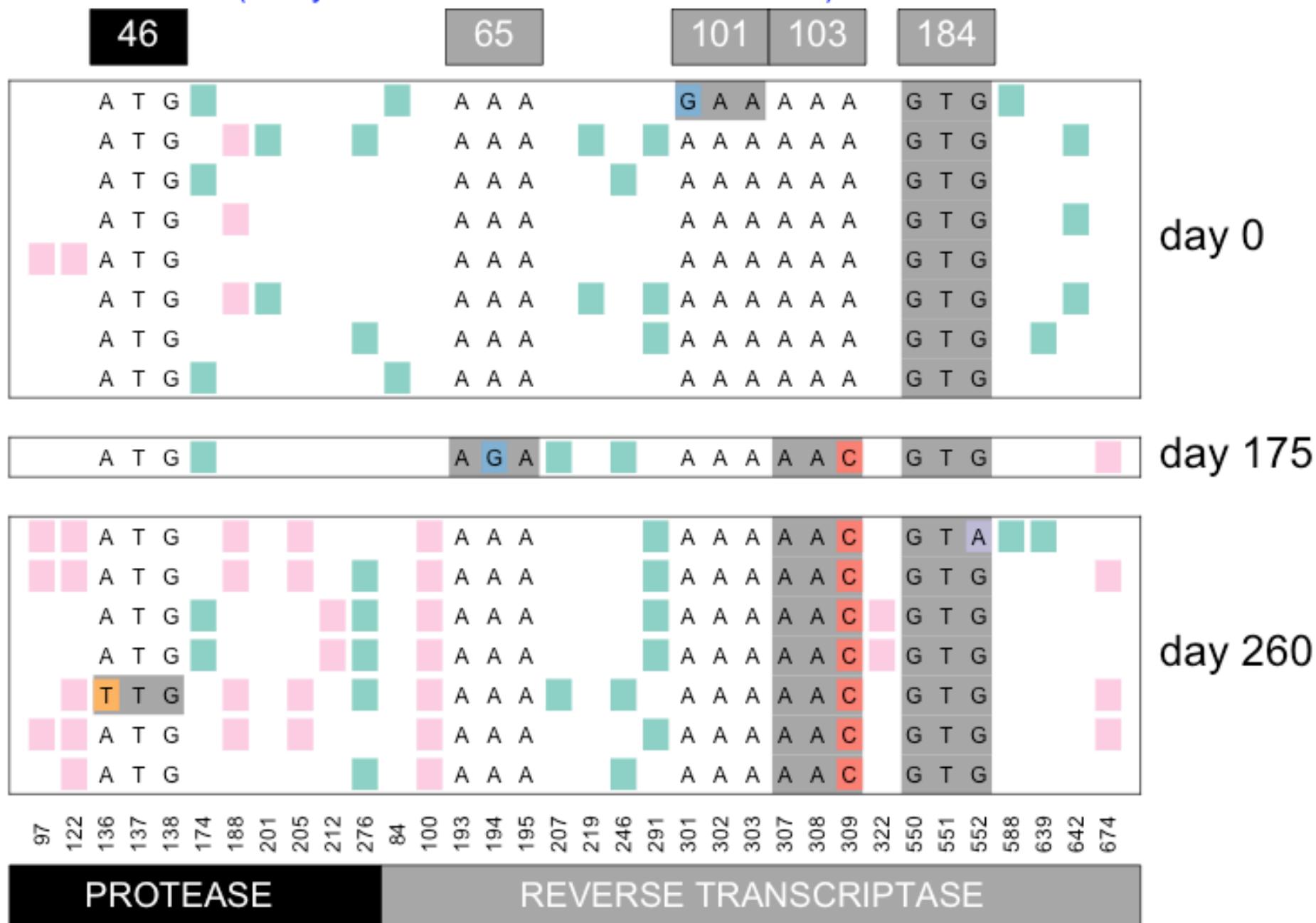
Viral sequences from patient 115

(likely treated with ZDV/3TC + efavirenz)



Viral sequences from patient 116

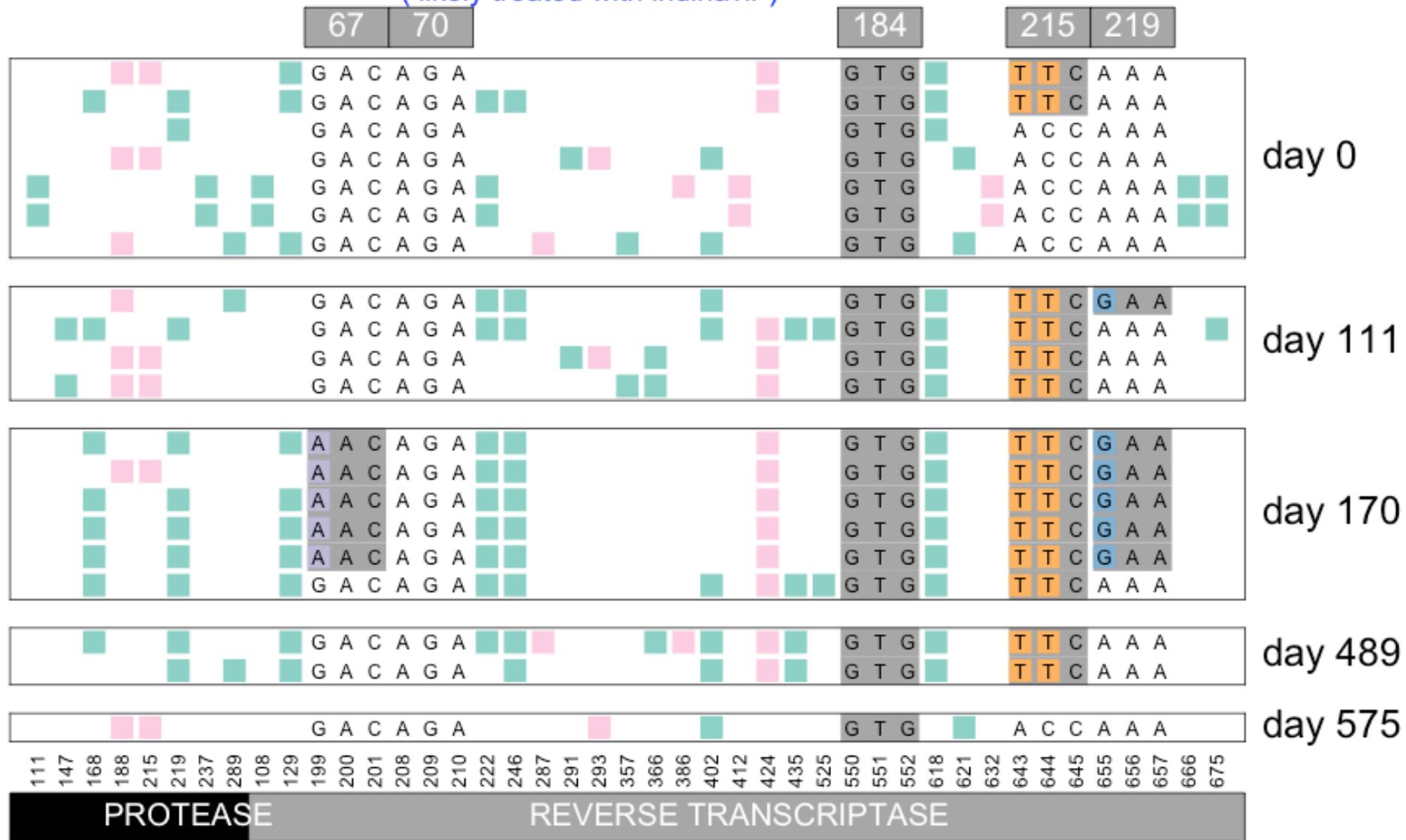
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 117

(likely treated with indinavir)



Williams, Pennings, 2018. Data from Bacheler et al 2000

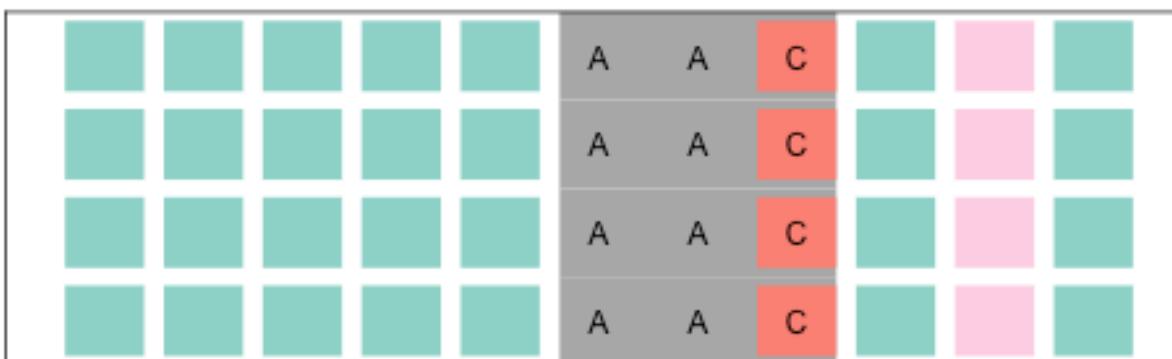
Viral sequences from patient 118

(likely treated with indinavir + efavirenz)

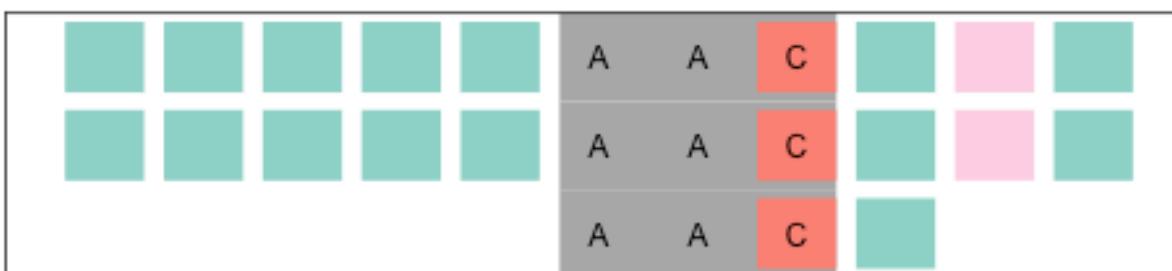
103

A A A

day 0



day 139



day 168

63

183

258

279

291

307

308

309

444

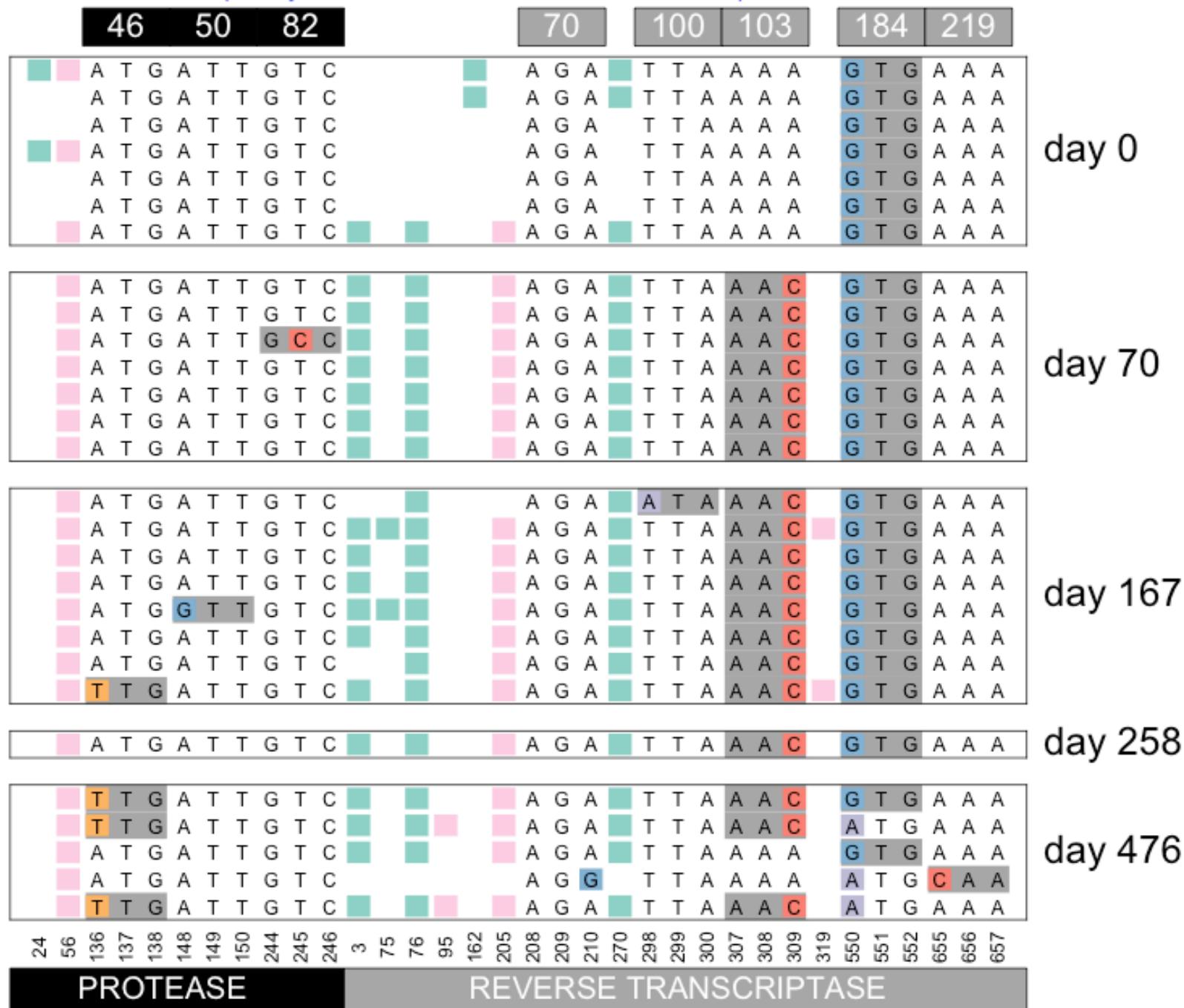
598

681

RT

Viral sequences from patient 119

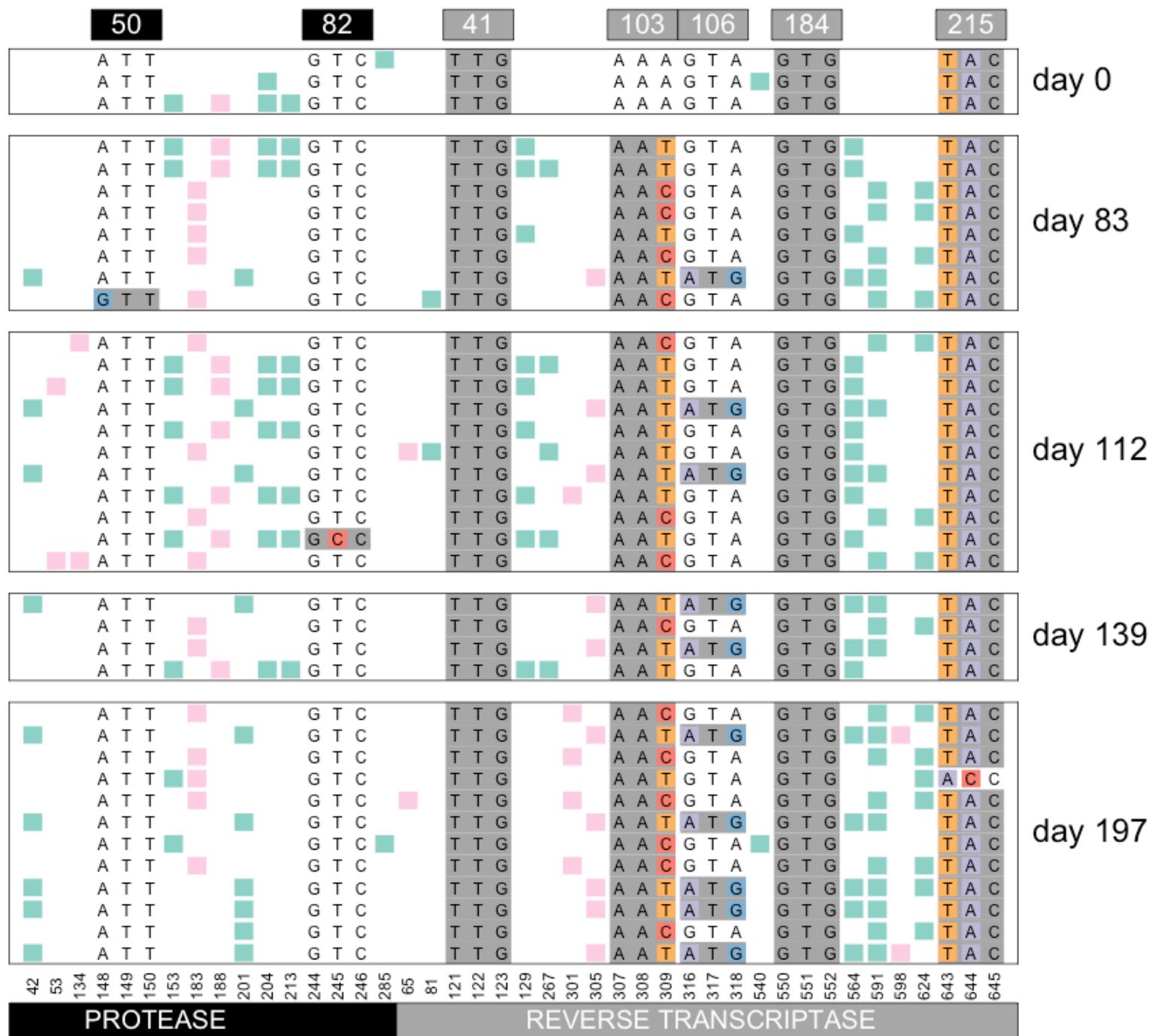
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

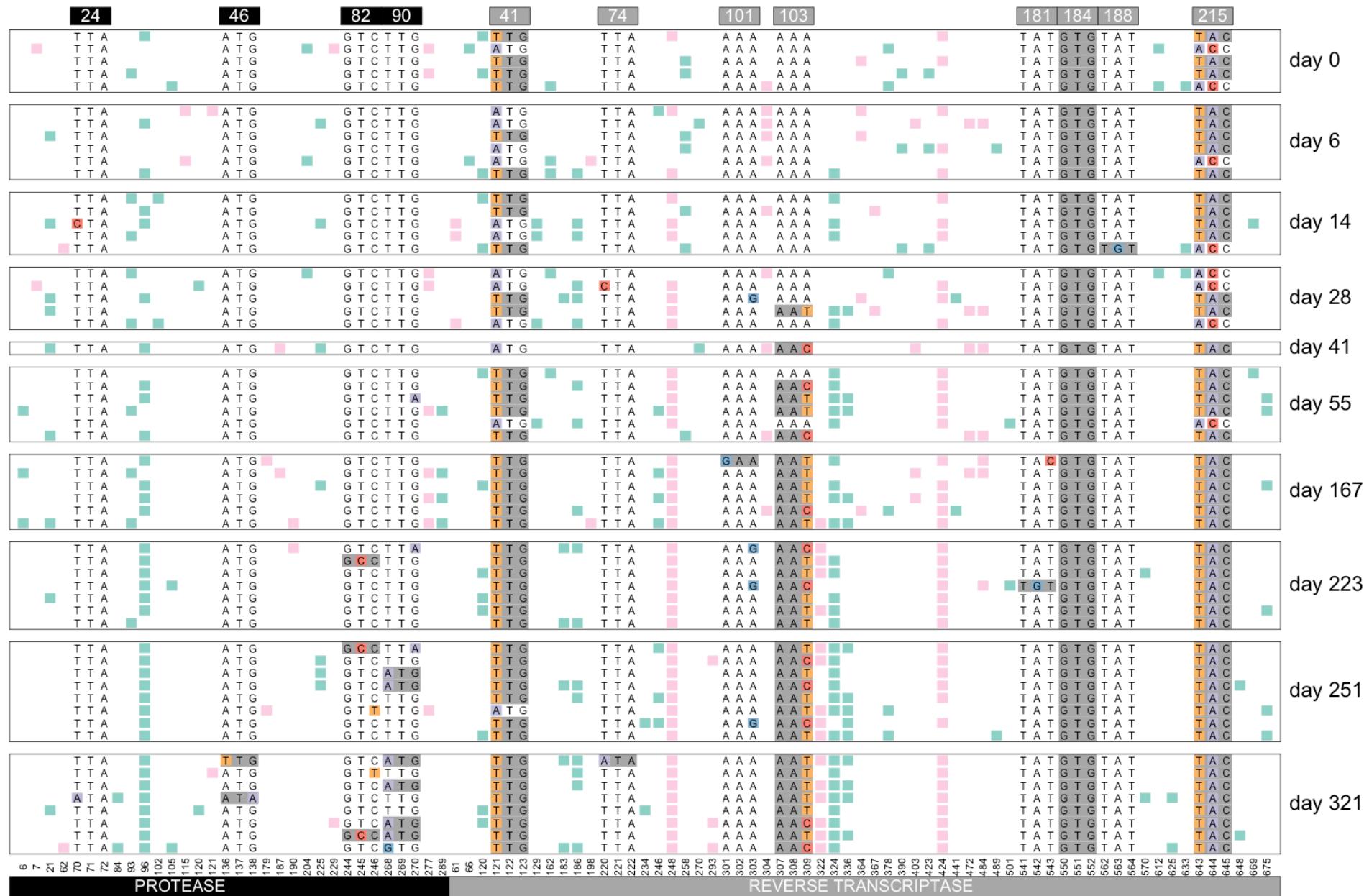
Viral sequences from patient 120

(likely treated with ZDV/3TC + efavirenz)



Viral sequences from patient 121

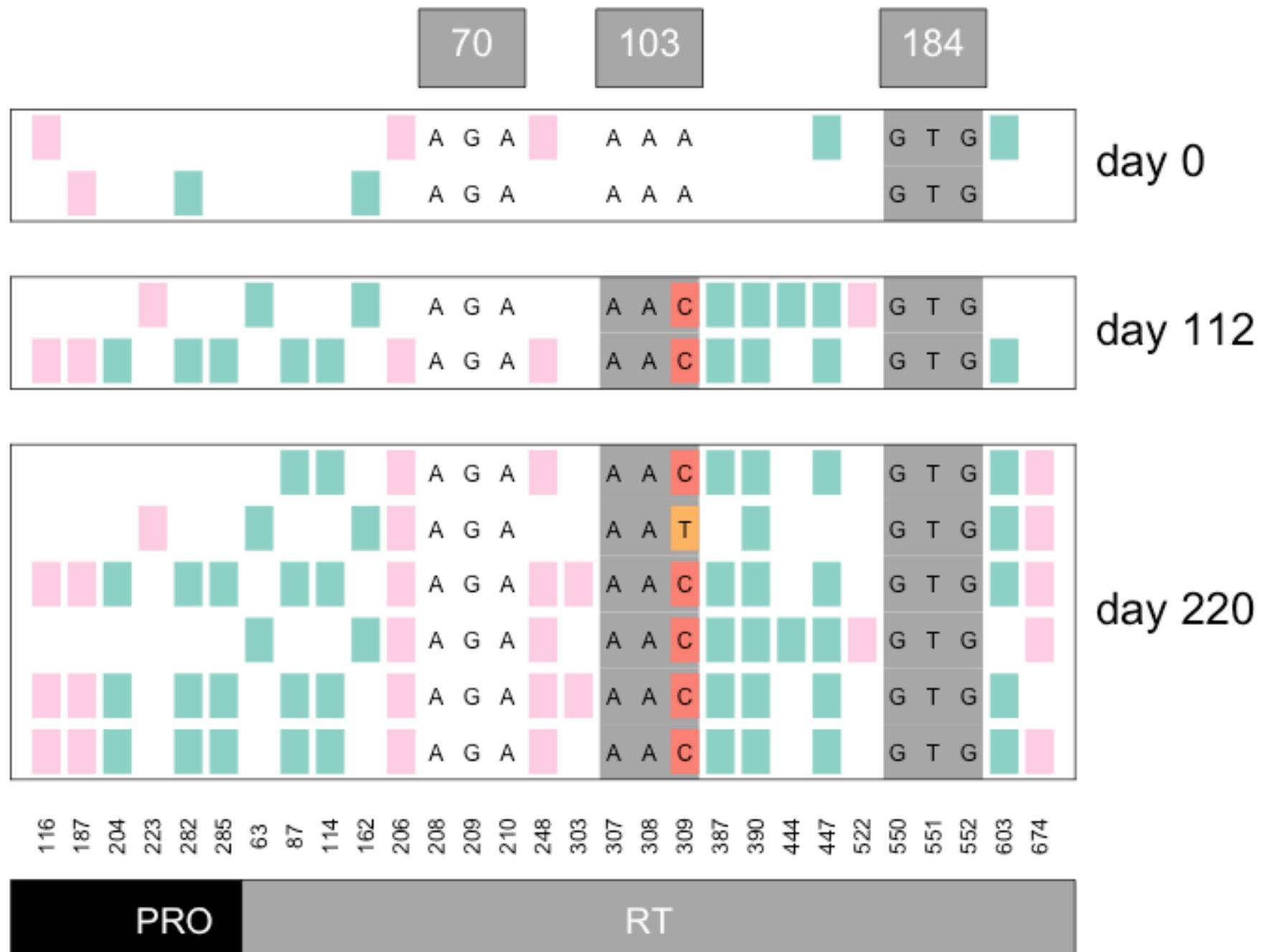
(likely treated with indinavir + efavirenz)



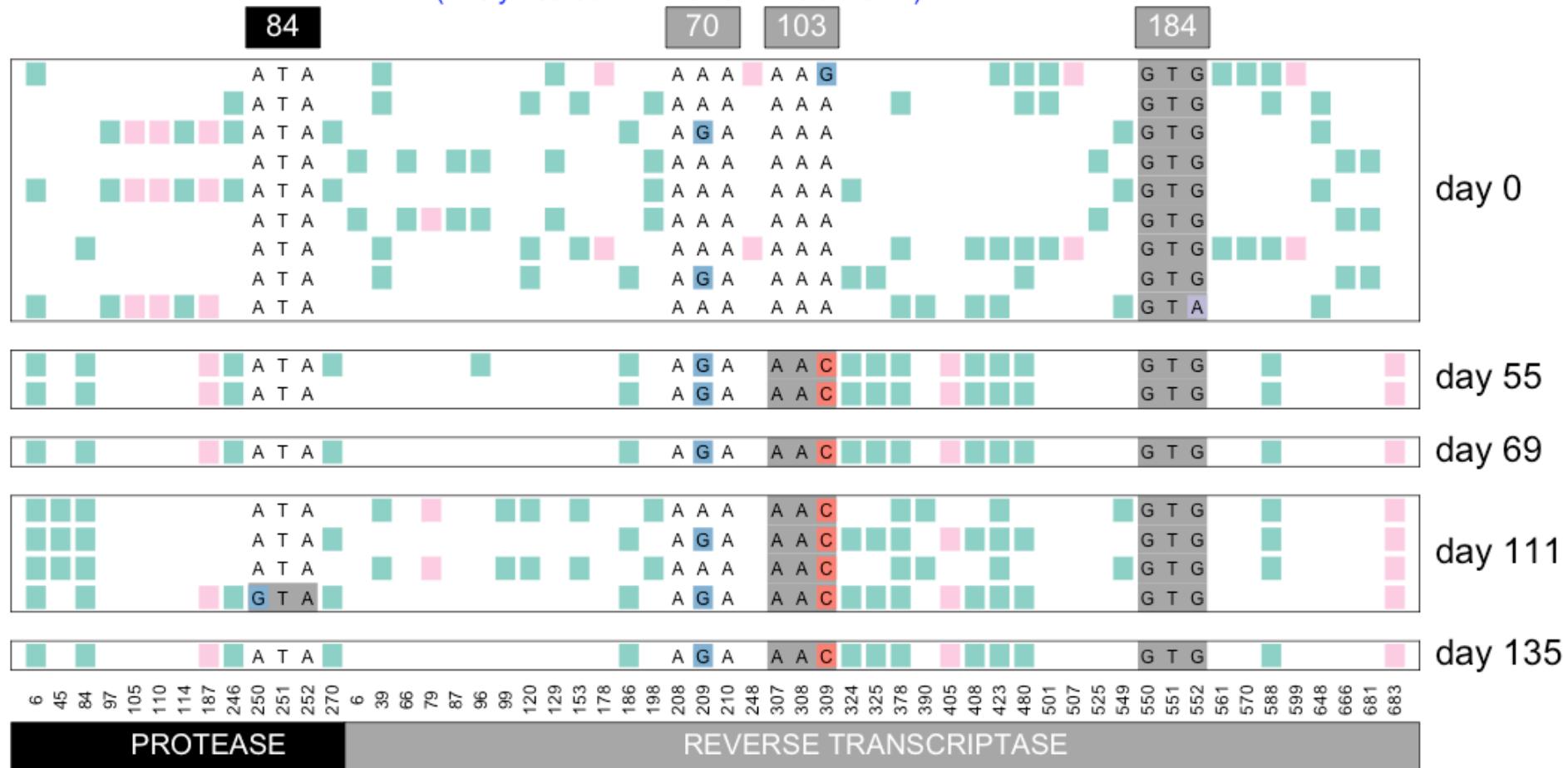
Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 122

(likely treated with ZDV/3TC + efavirenz)



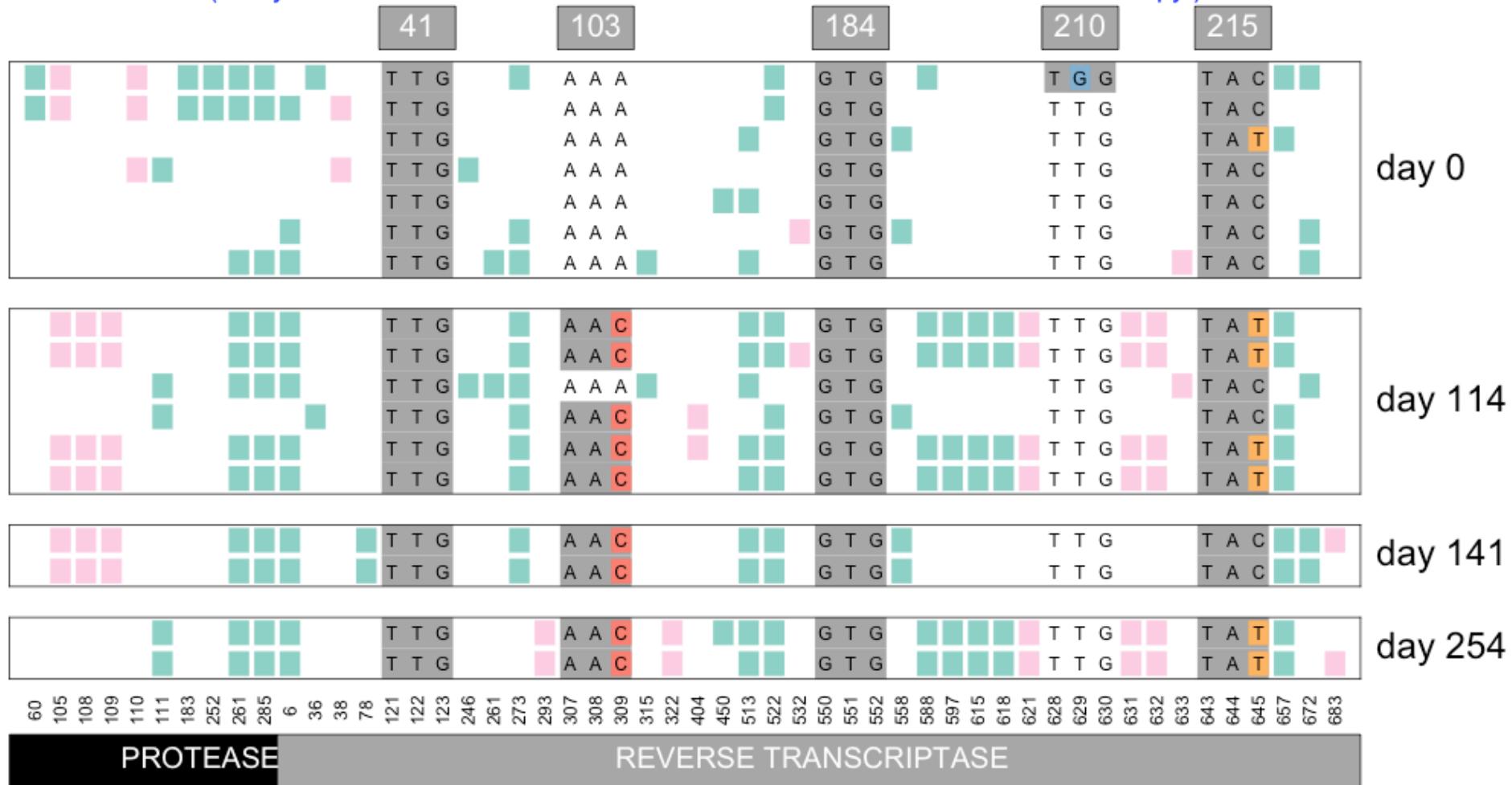
Viral sequences from patient 123 (likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 124

(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 126 (likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

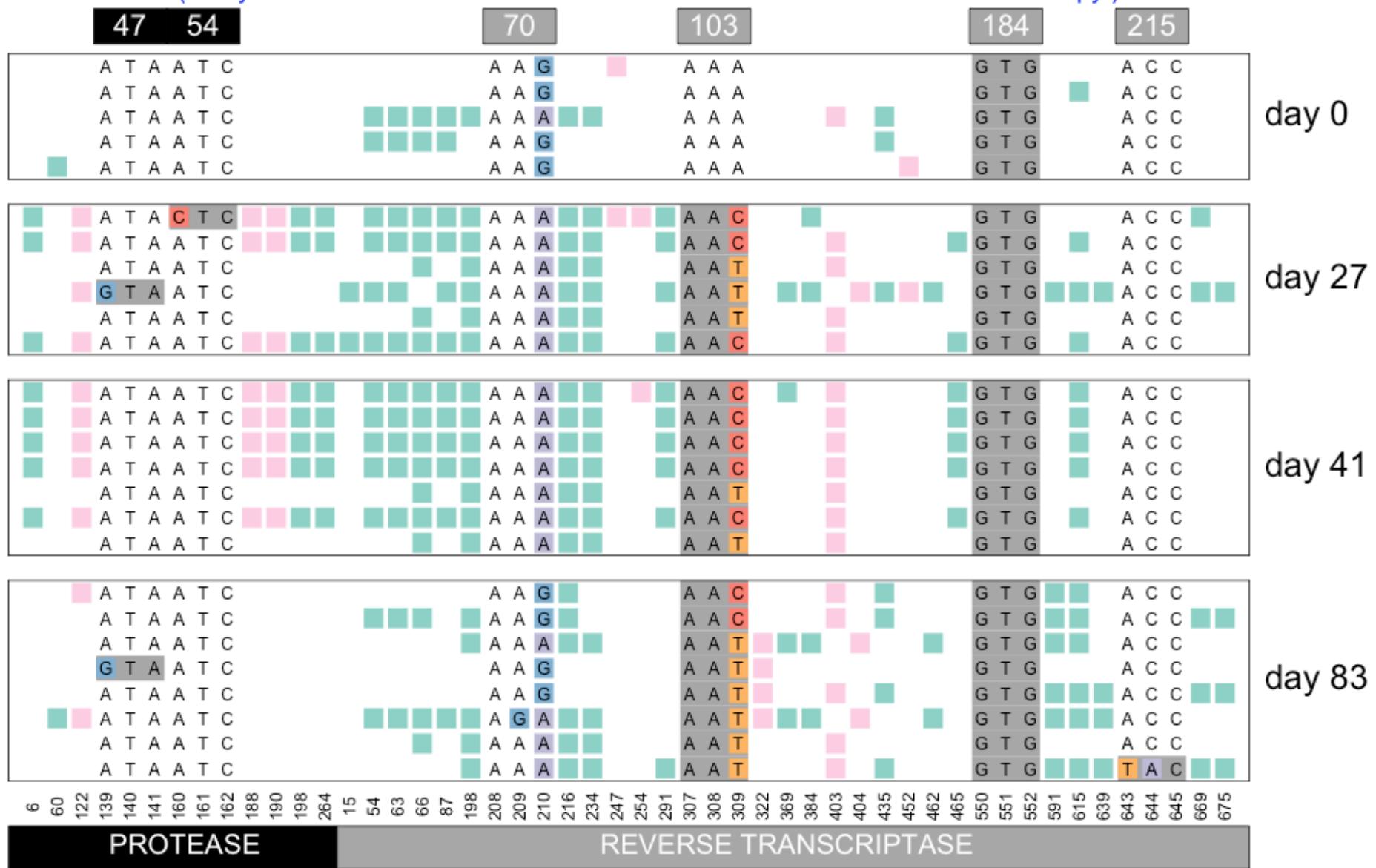
Viral sequences from patient 128

(likely treated with indinavir + efavirenz)



Viral sequences from patient 130

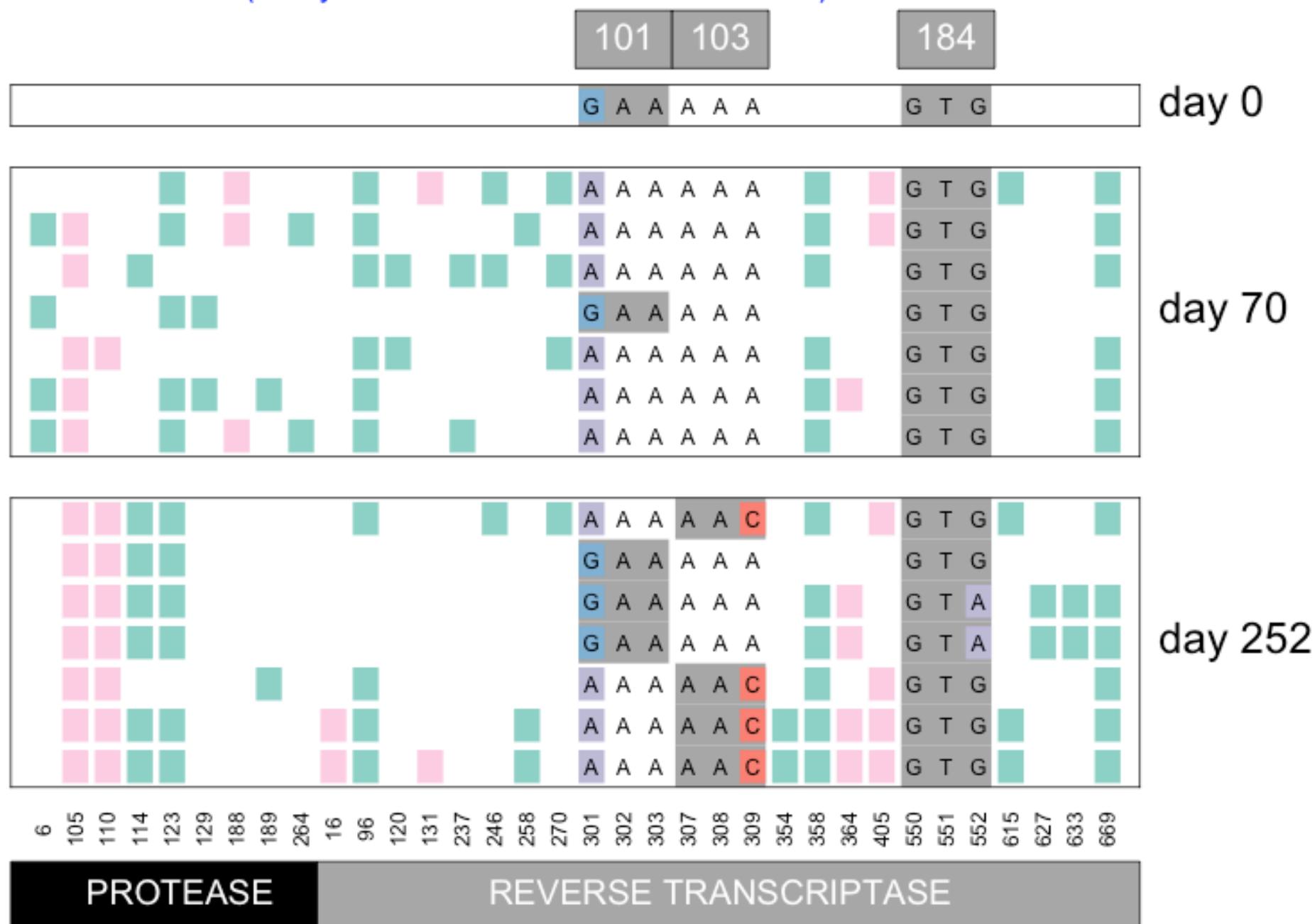
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 131

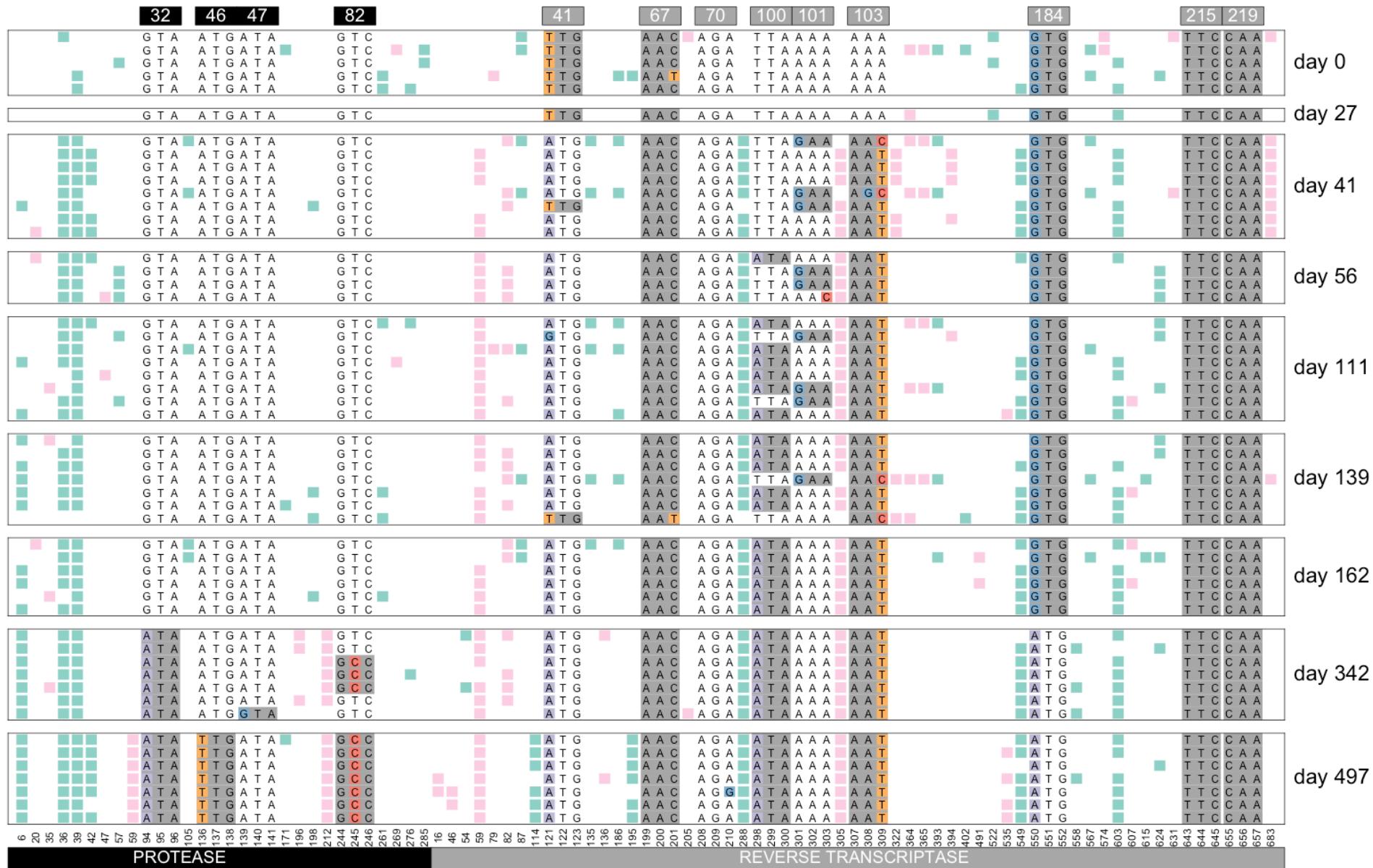
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 132

(likely treated with indinavir + efavirenz)



Viral sequences from patient 133

(likely treated with indinavir + efavirenz)

82

41

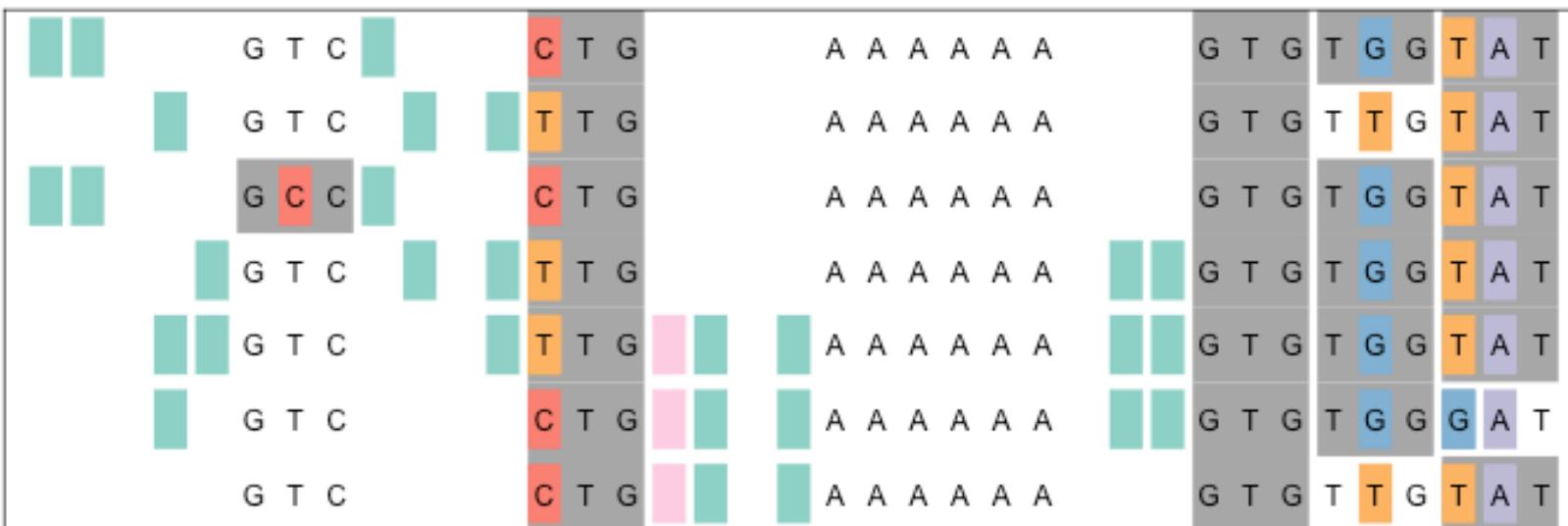
101

103

184

210

215



day 0

day 280

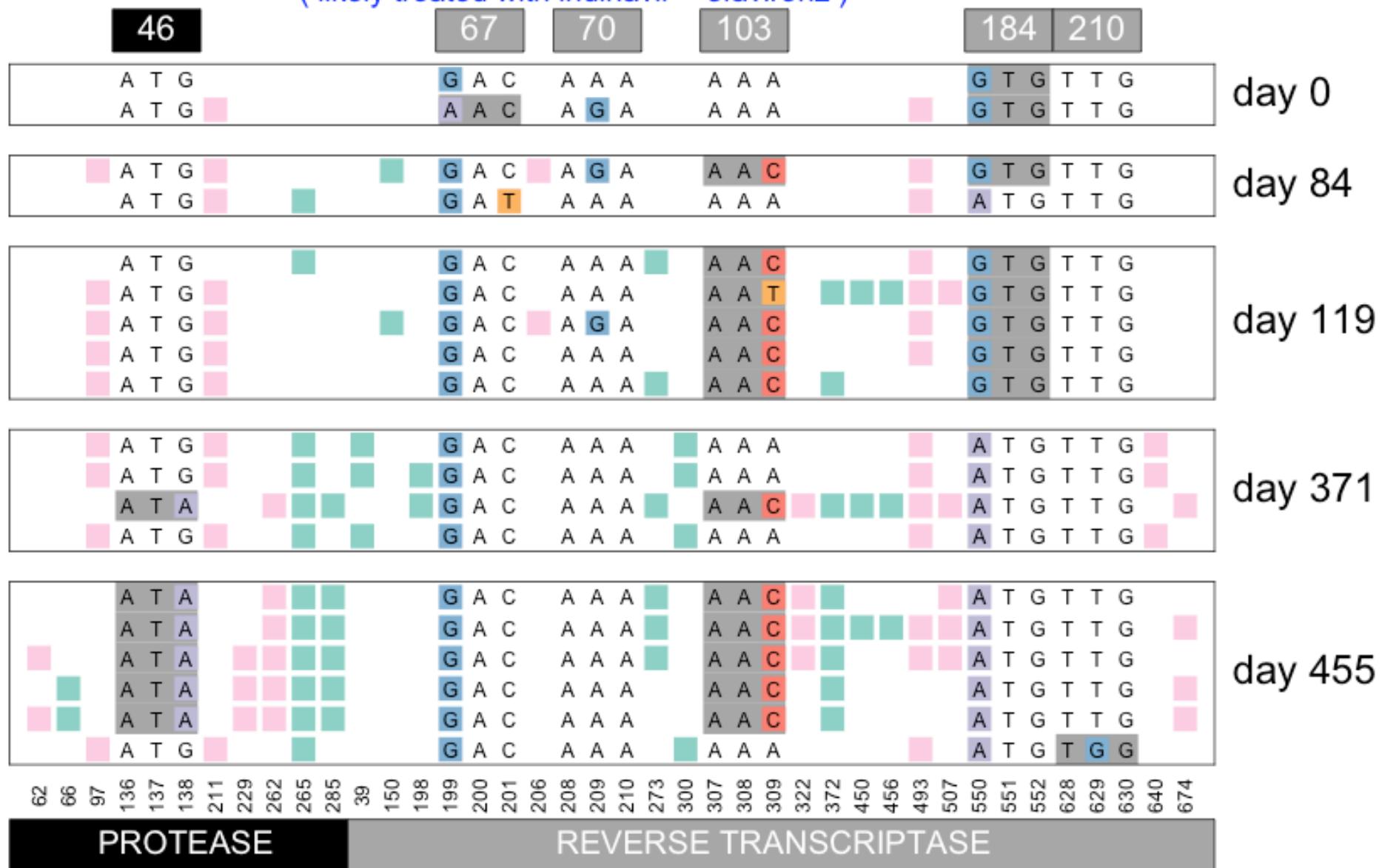
PROTEASE

REVERSE TRANSCRIPTASE

Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 134

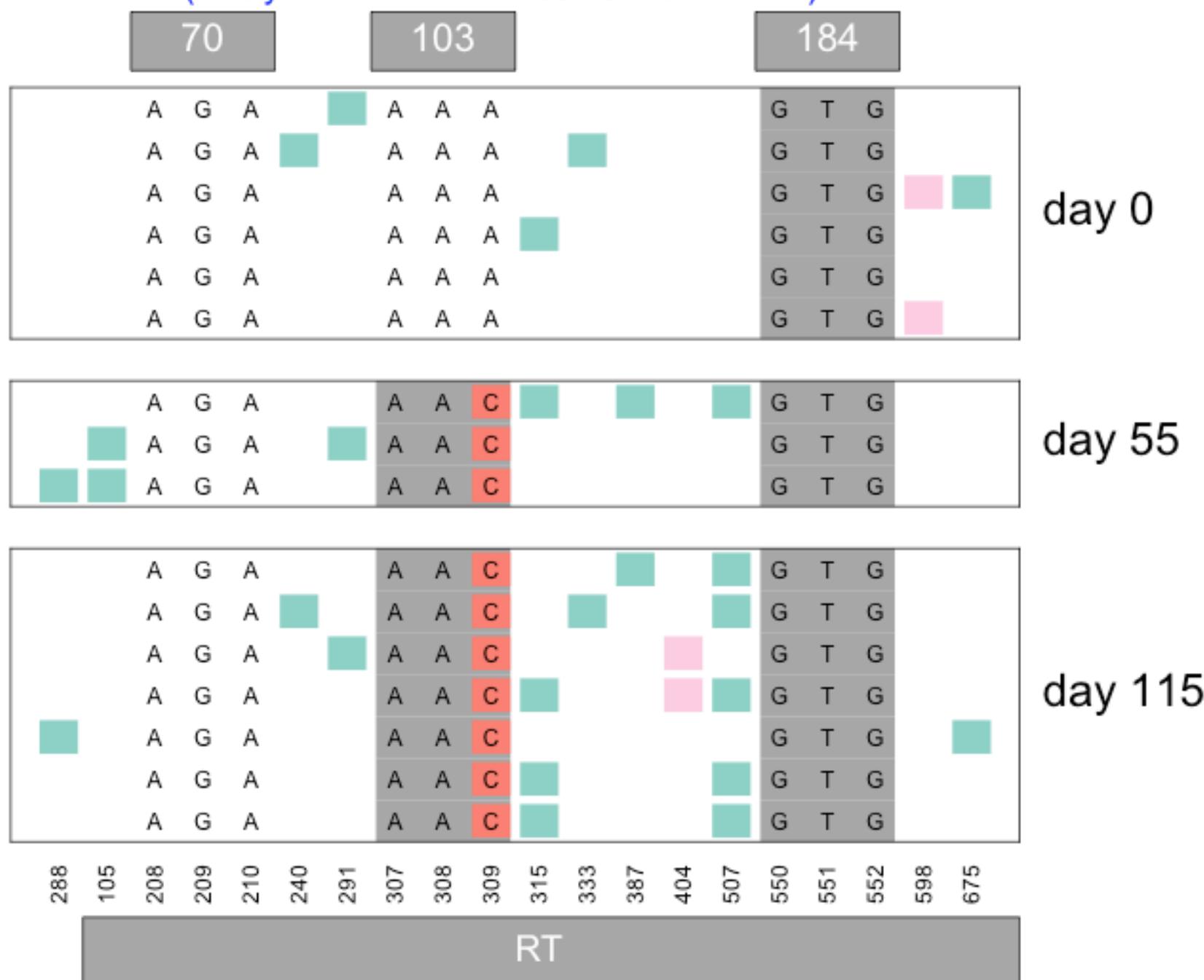
(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

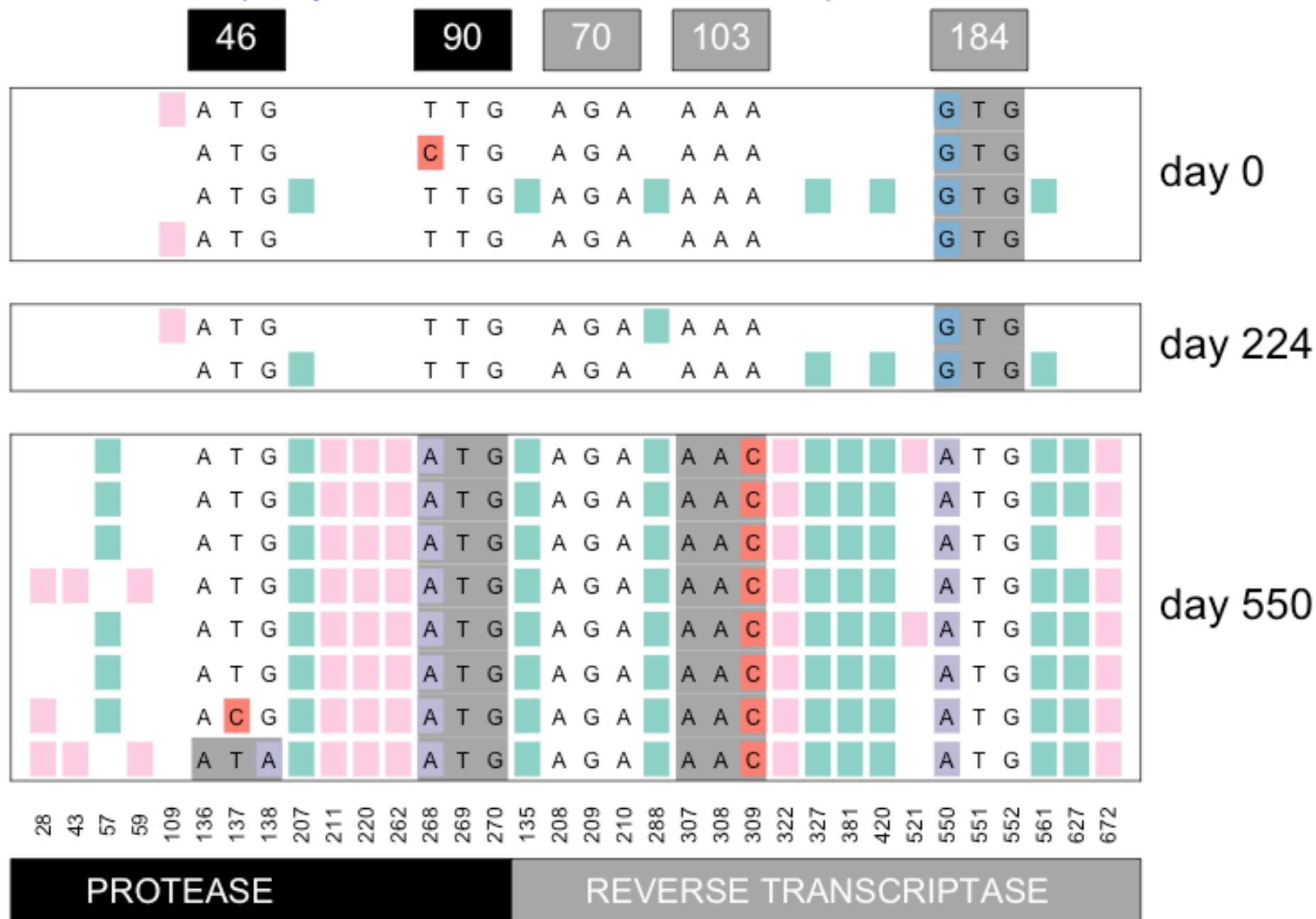
Viral sequences from patient 135

(likely treated with ZDV/3TC + efavirenz)



Viral sequences from patient 138

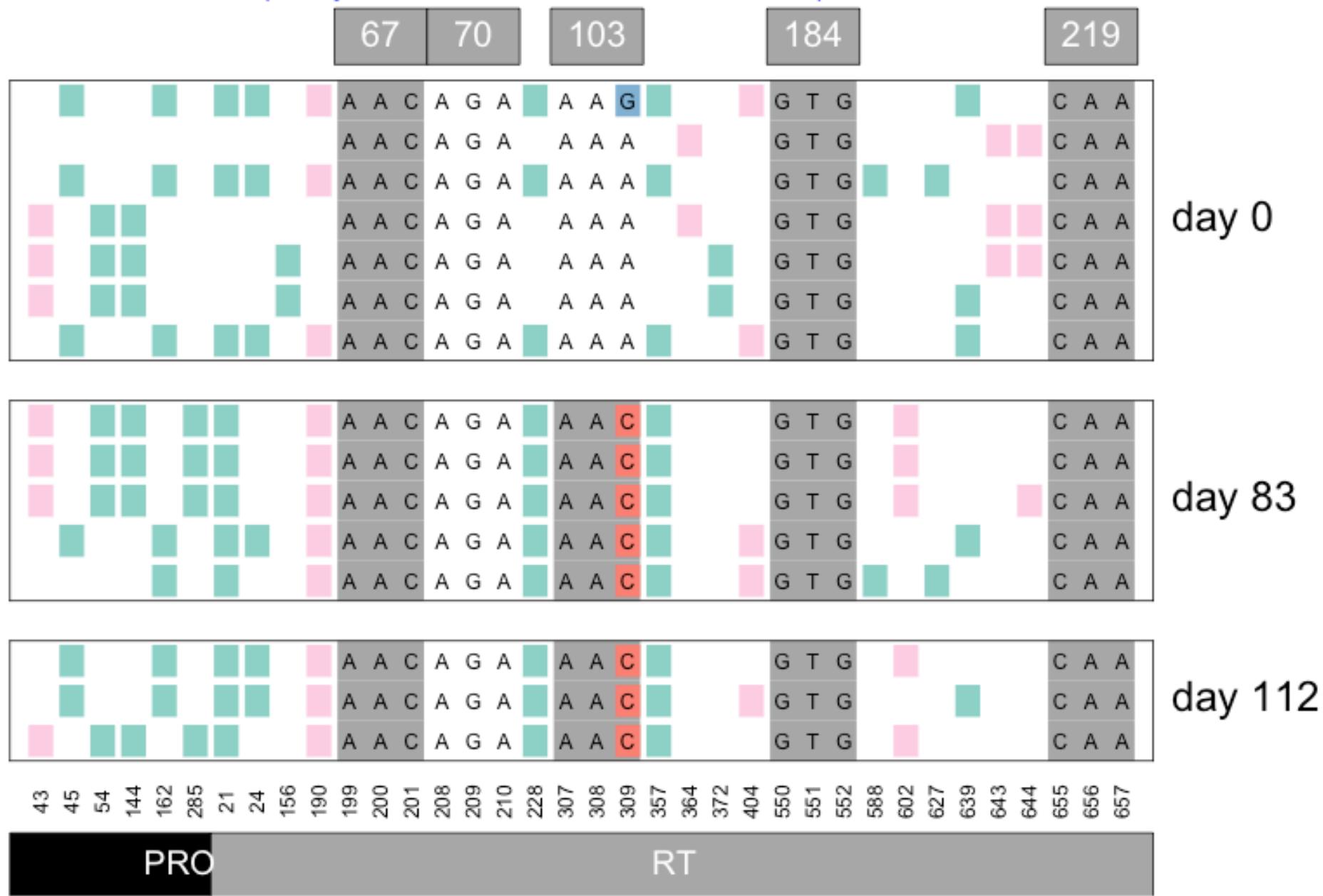
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

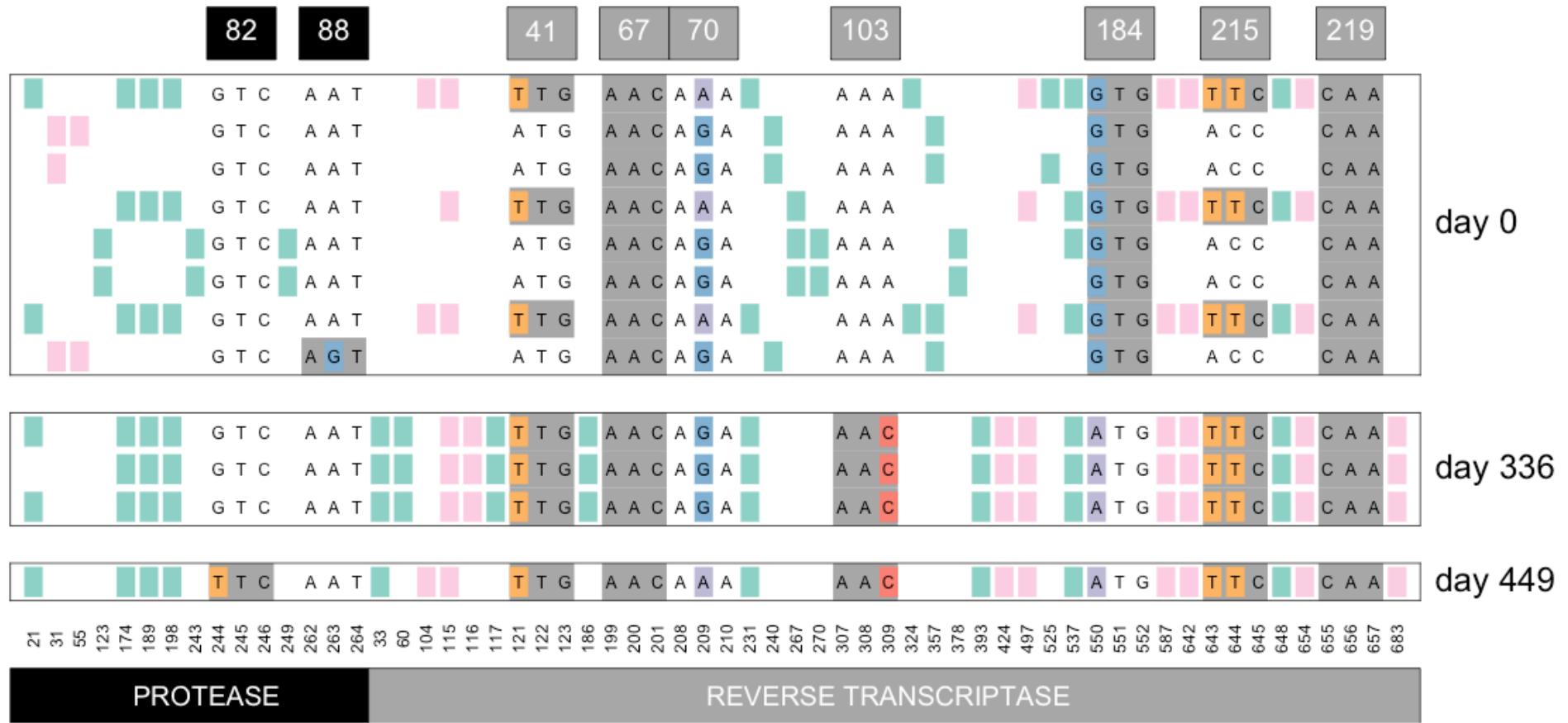
Viral sequences from patient 139

(likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

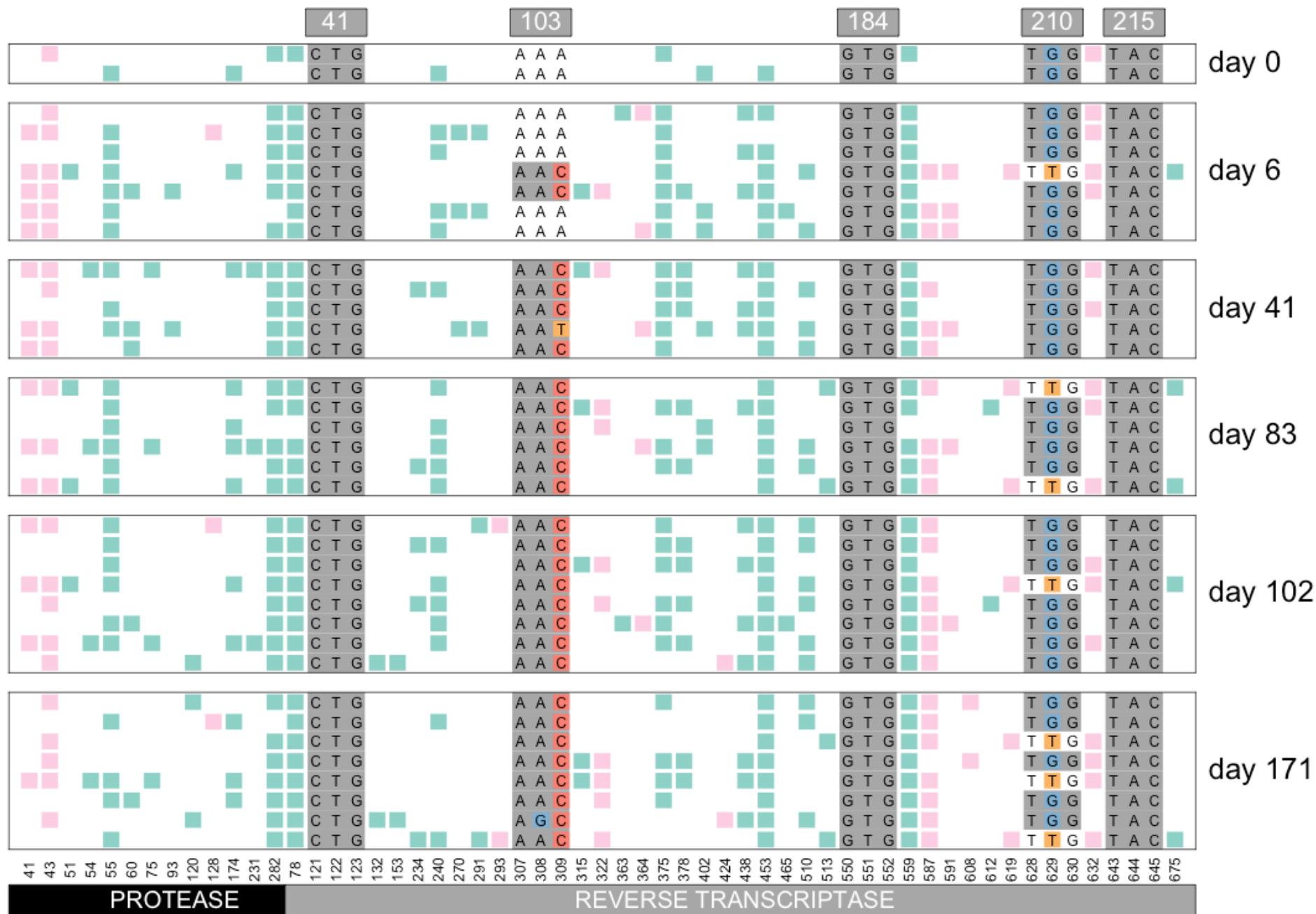
Viral sequences from patient 140
 (likely treated with indinavir + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

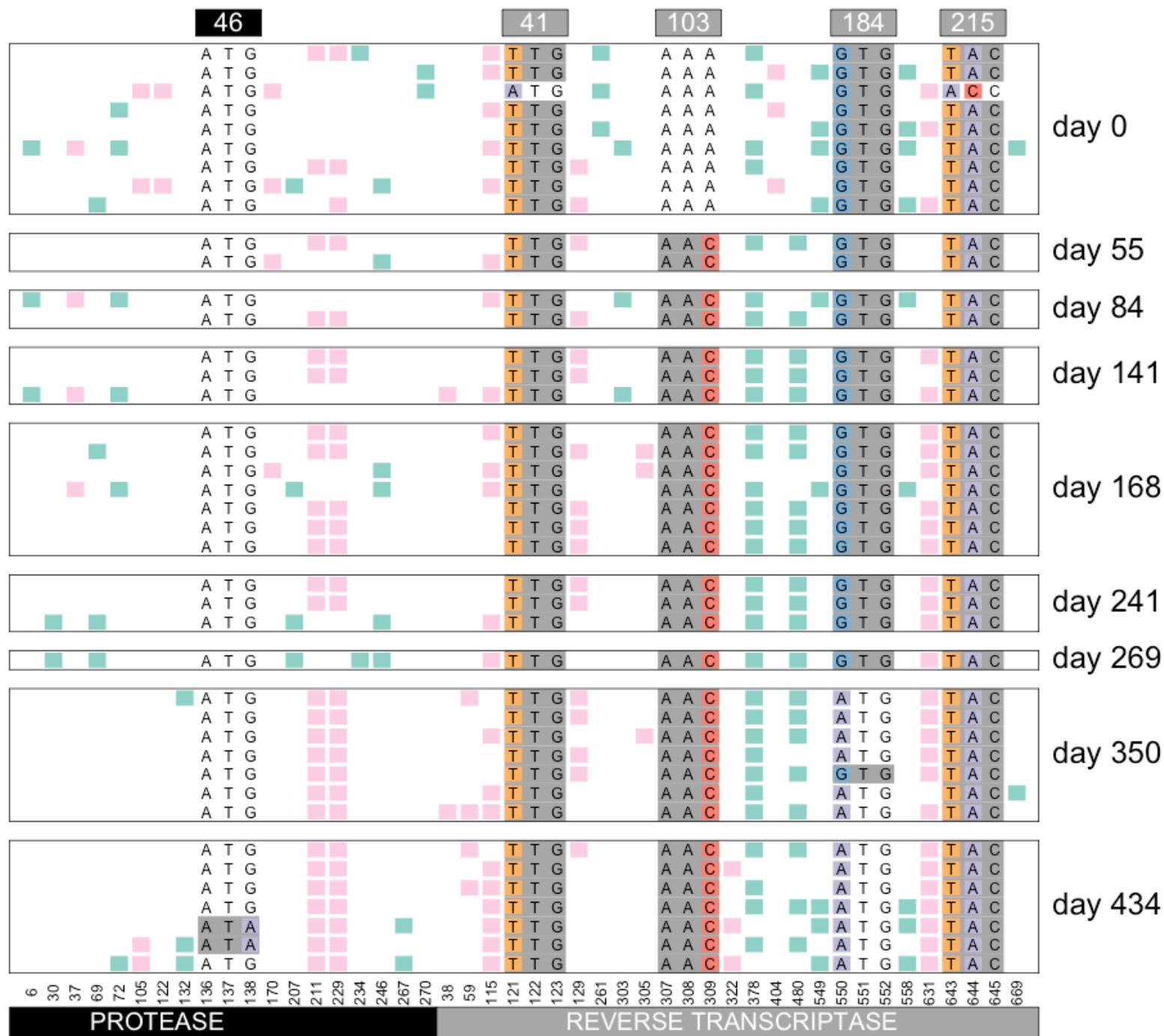
Viral sequences from patient 141

(likely treated with indinavir then later switched to efavirenz combination therapy)



Viral sequences from patient 142

(likely treated with indinavir then later switched to efavirenz combination therapy)



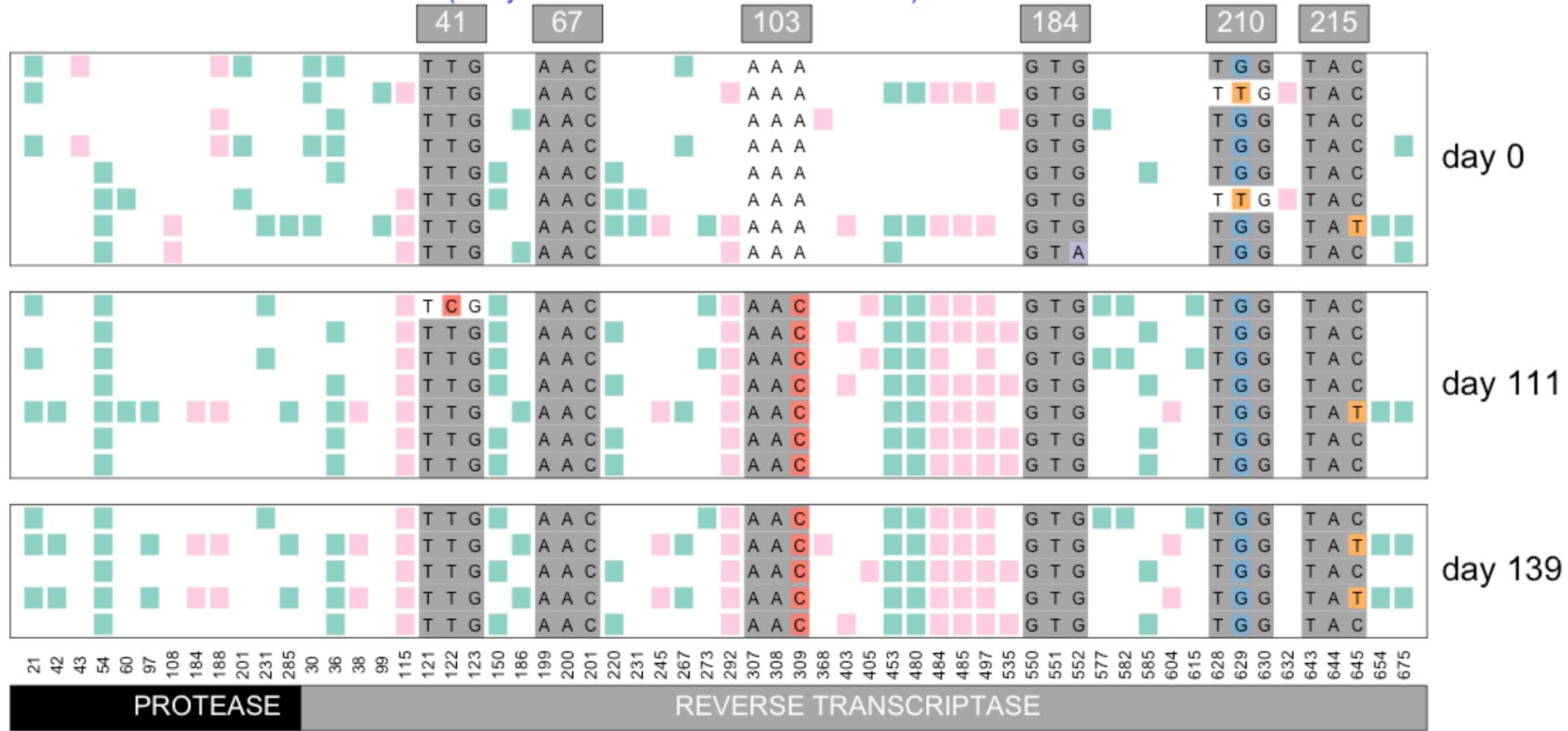
Viral sequences from patient 143

(likely treated with indinavir then later switched to efavirenz combination therapy)



Viral sequences from patient 144

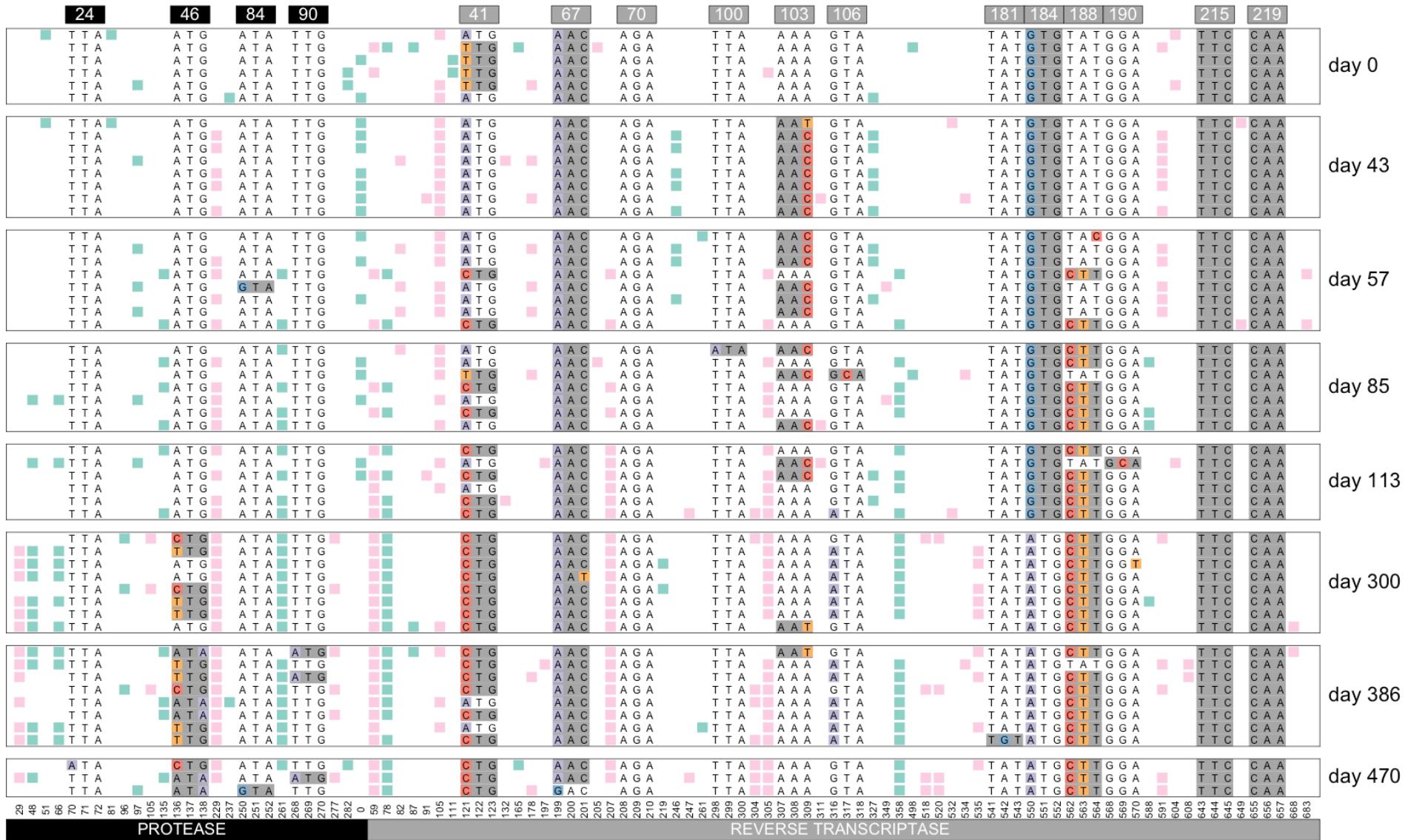
(likely treated with ZDV/3TC + efavirenz)



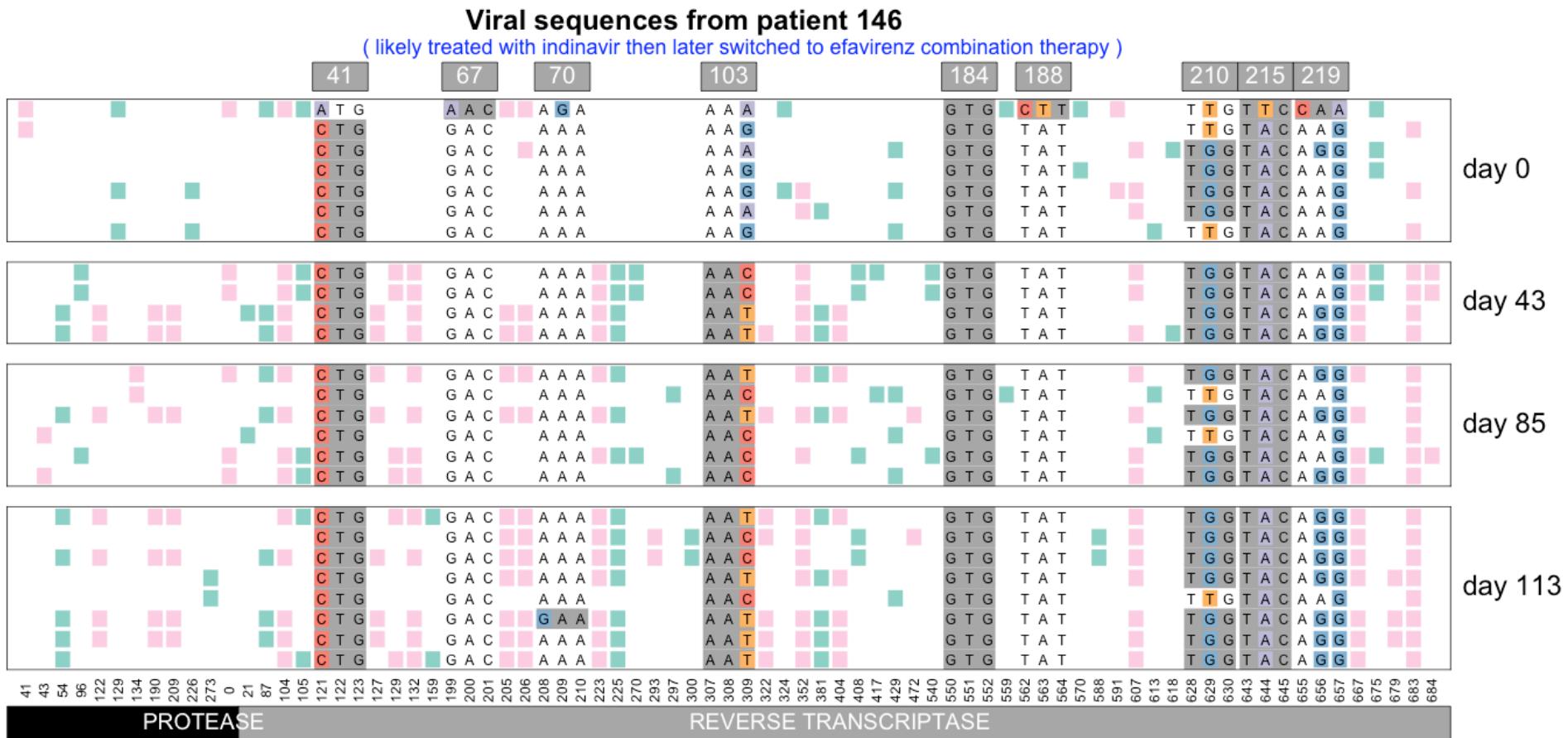
Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 145

(likely treated with indinavir then later switched to efavirenz combination therapy)



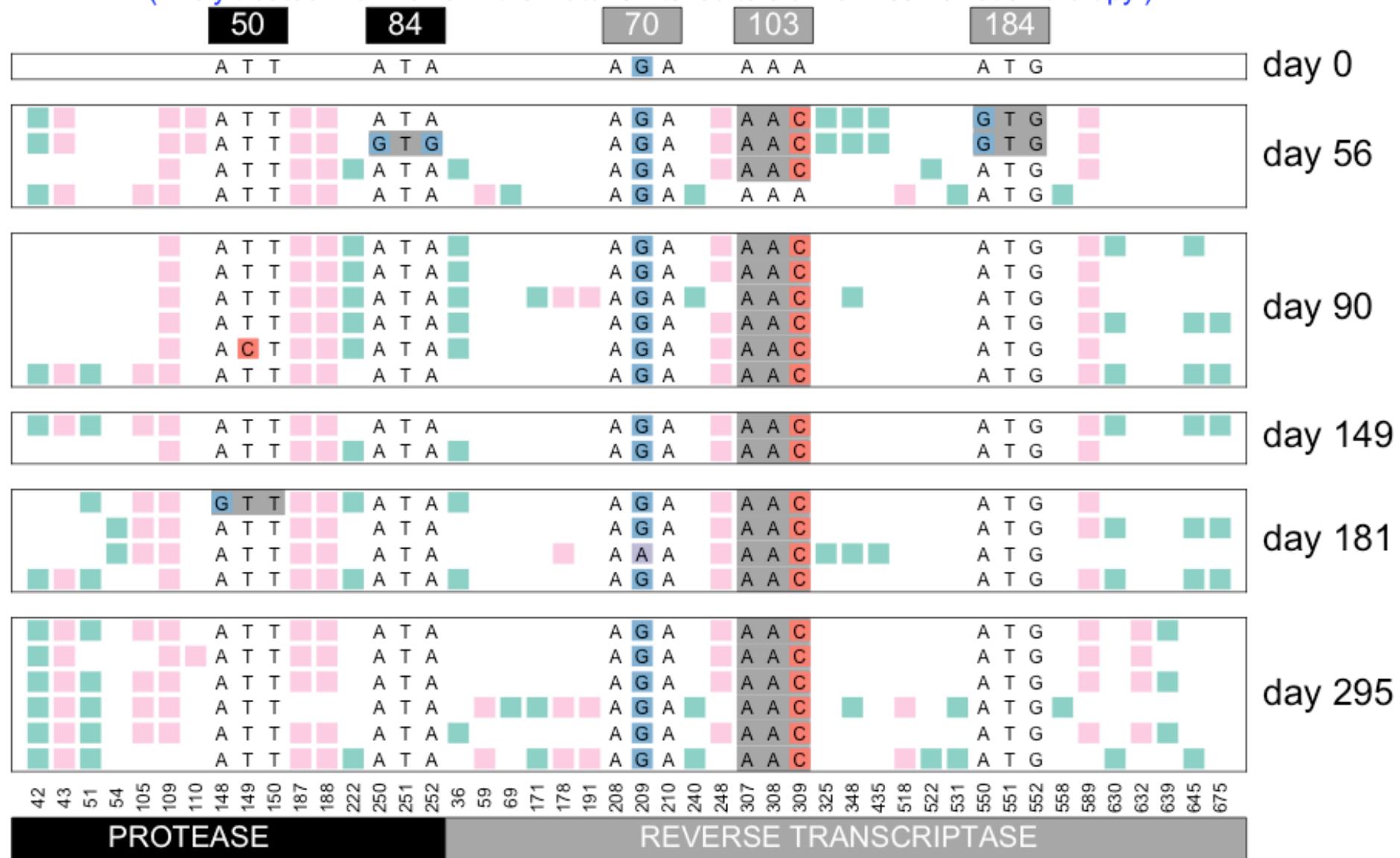
Williams, Pennings, 2018. Data from Bacheler et al 2000



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 147

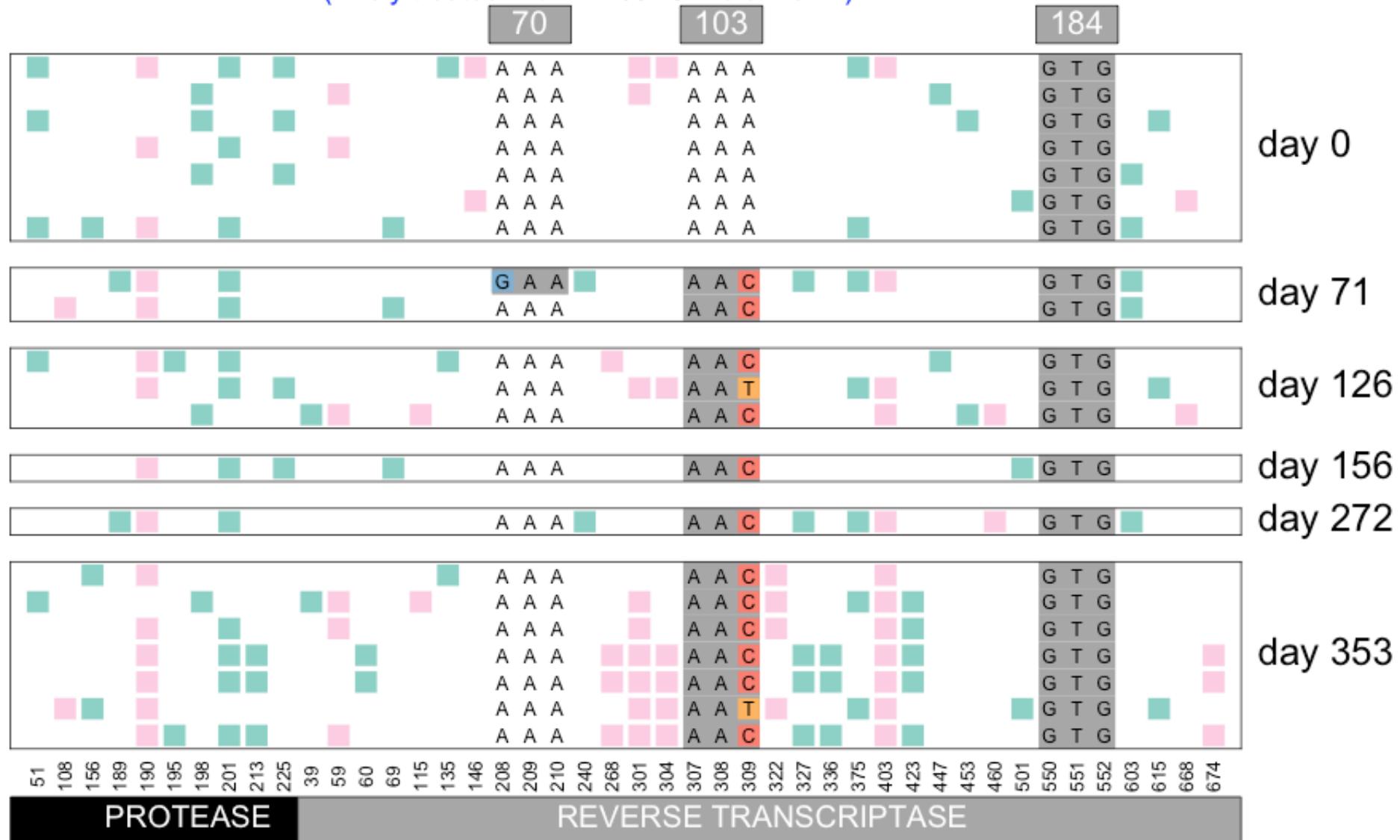
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 148

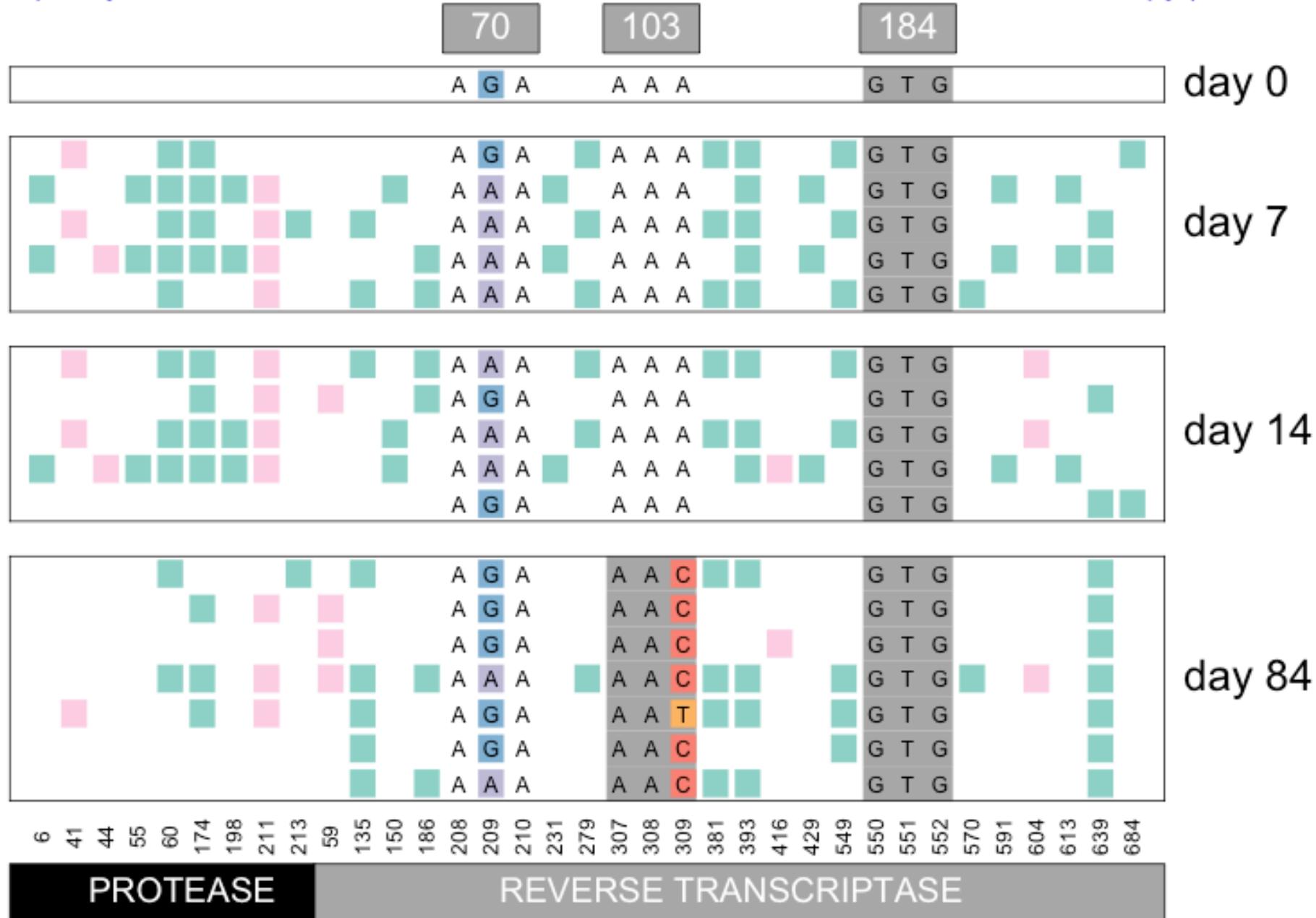
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 151

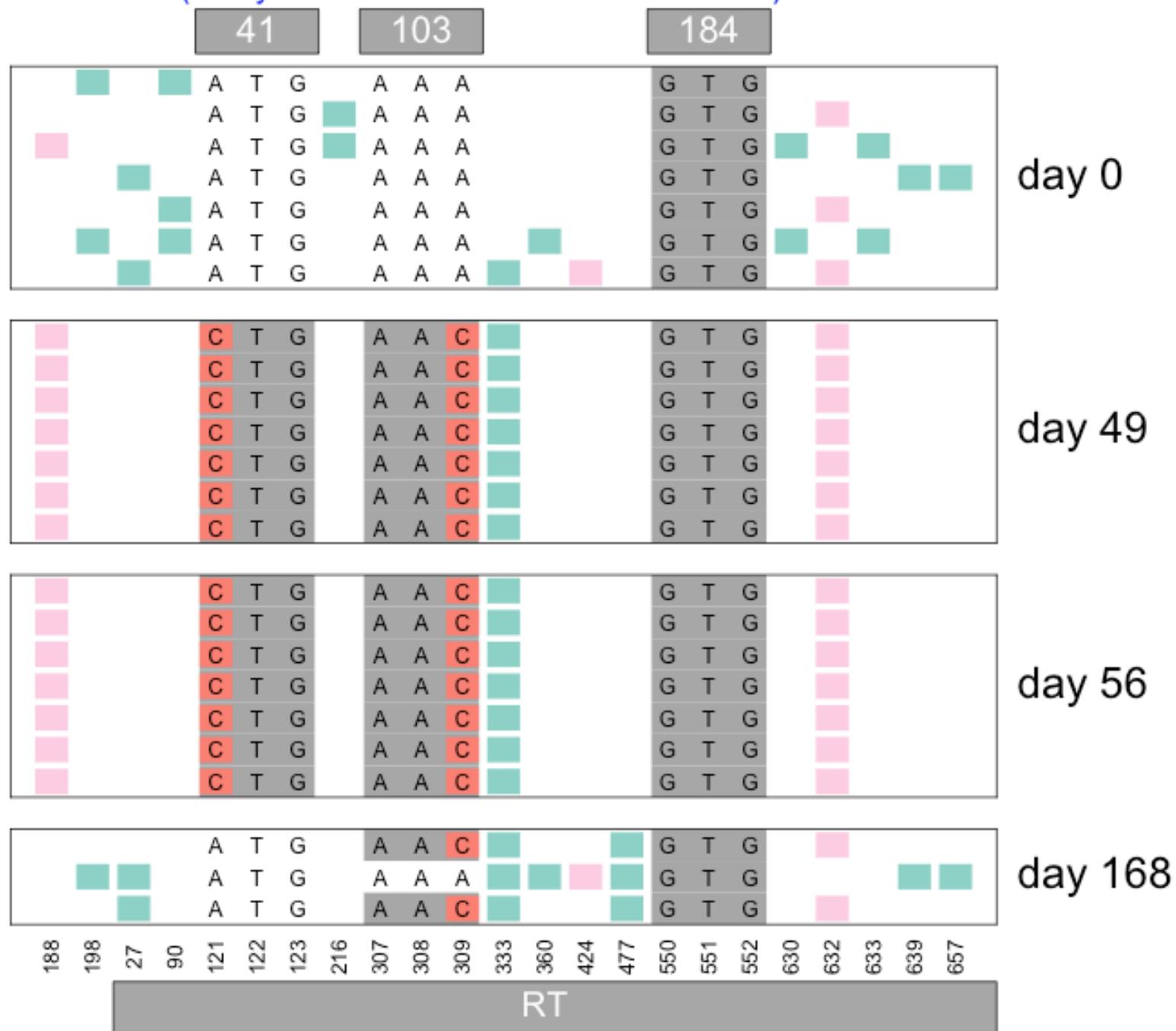
(likely treated with indinavir then later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

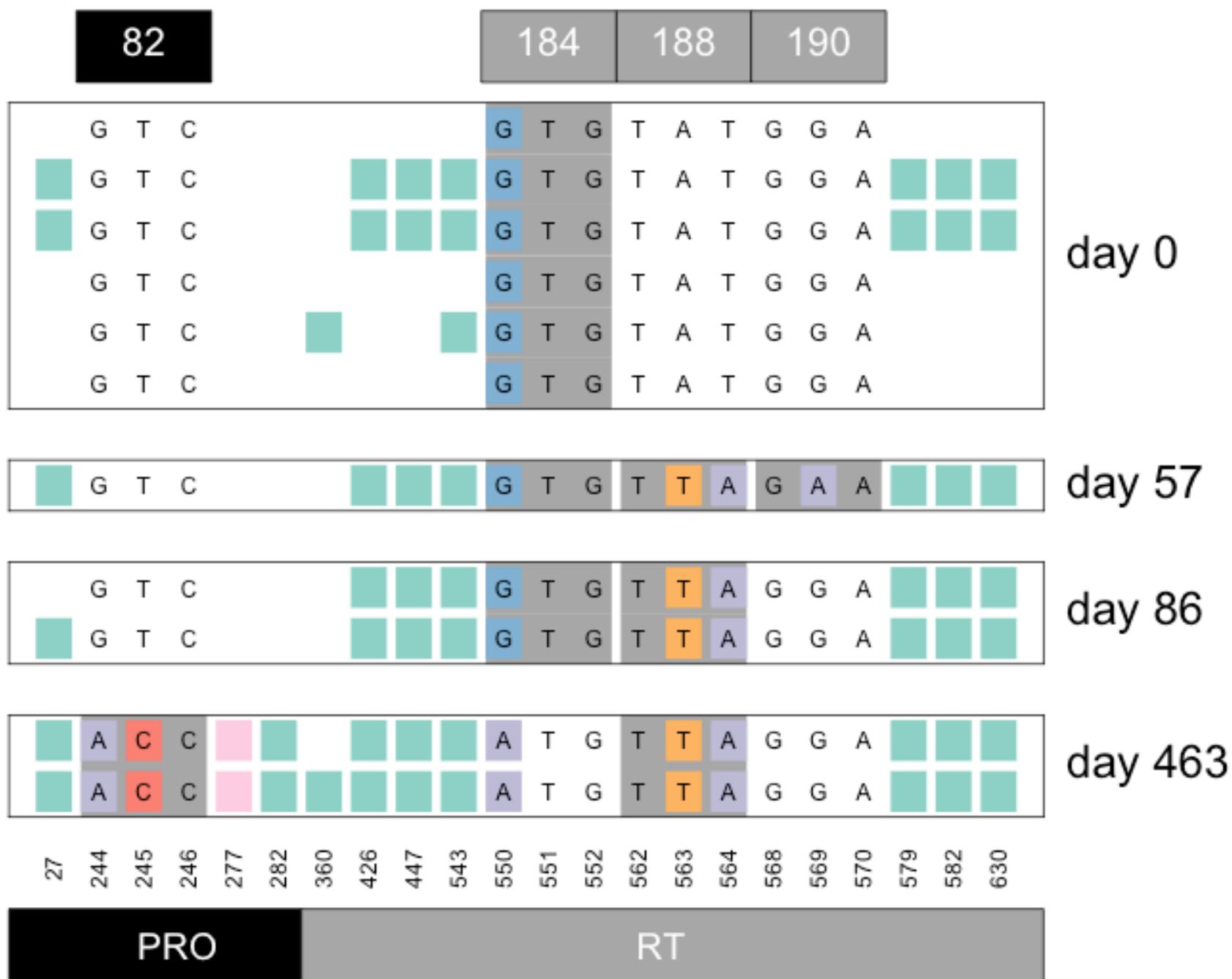
Viral sequences from patient 152

(likely treated with ZDV/3TC + efavirenz)



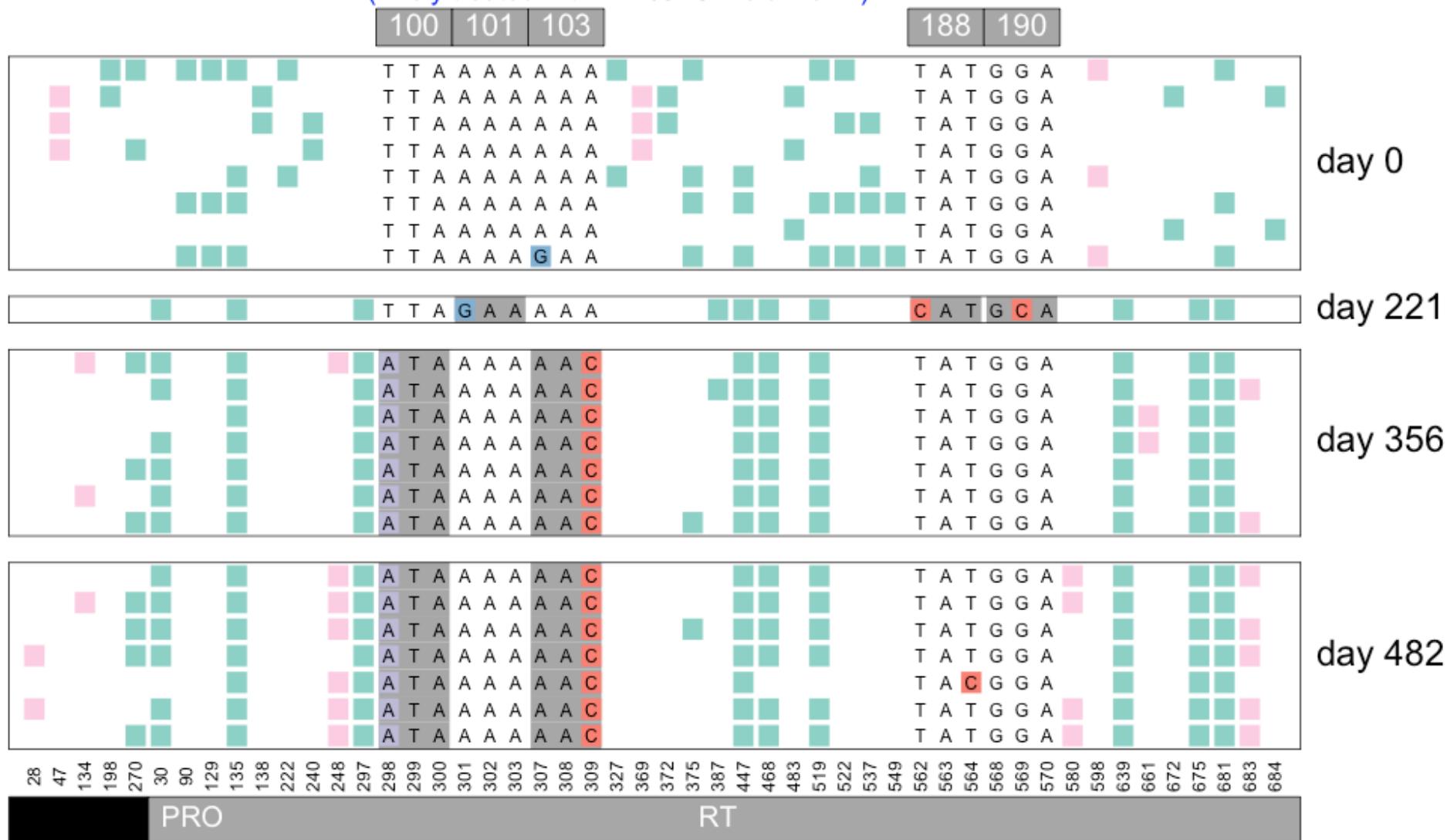
Viral sequences from patient 153

(likely treated with ZDV/3TC + efavirenz)



Viral sequences from patient 154

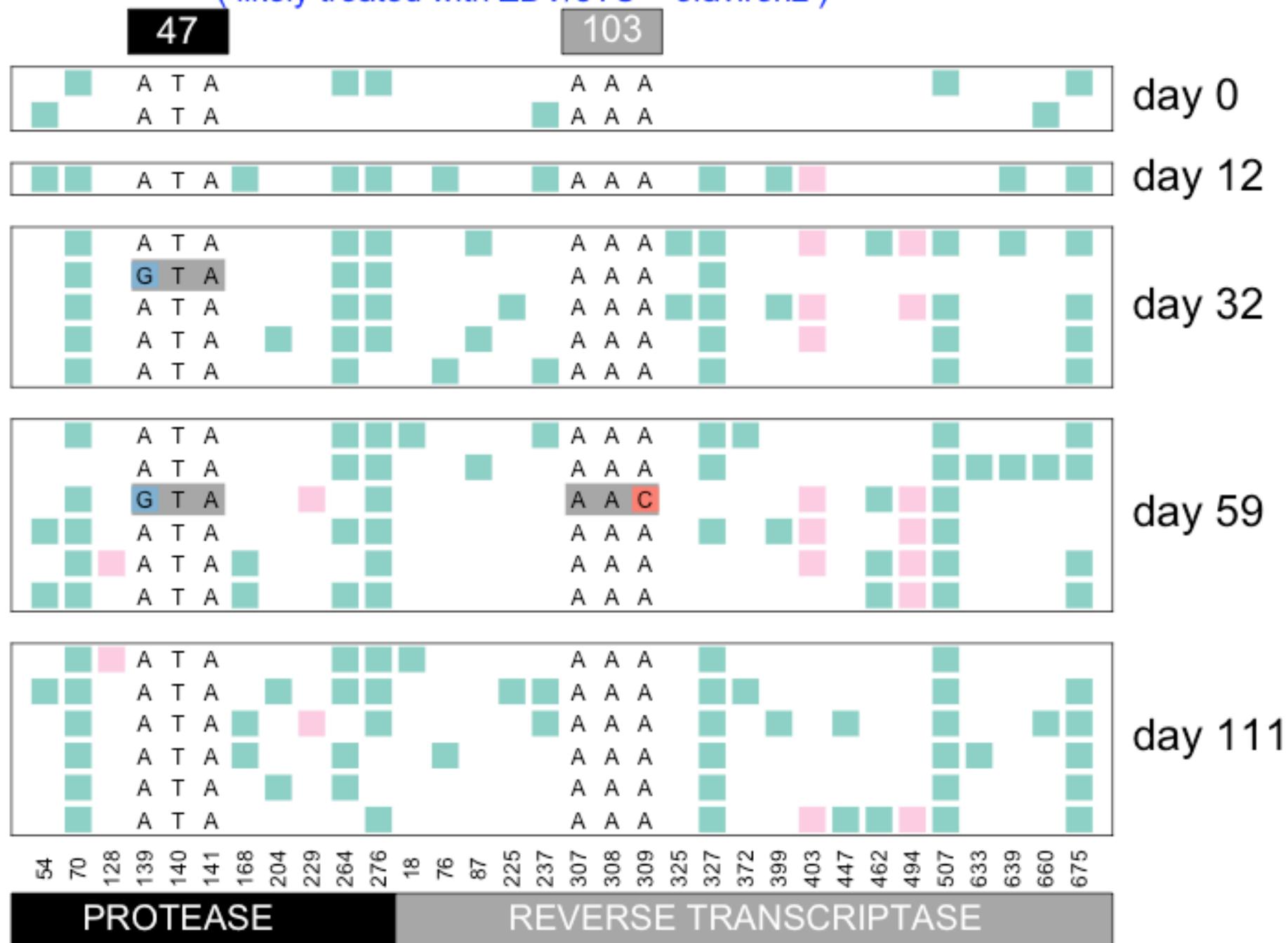
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

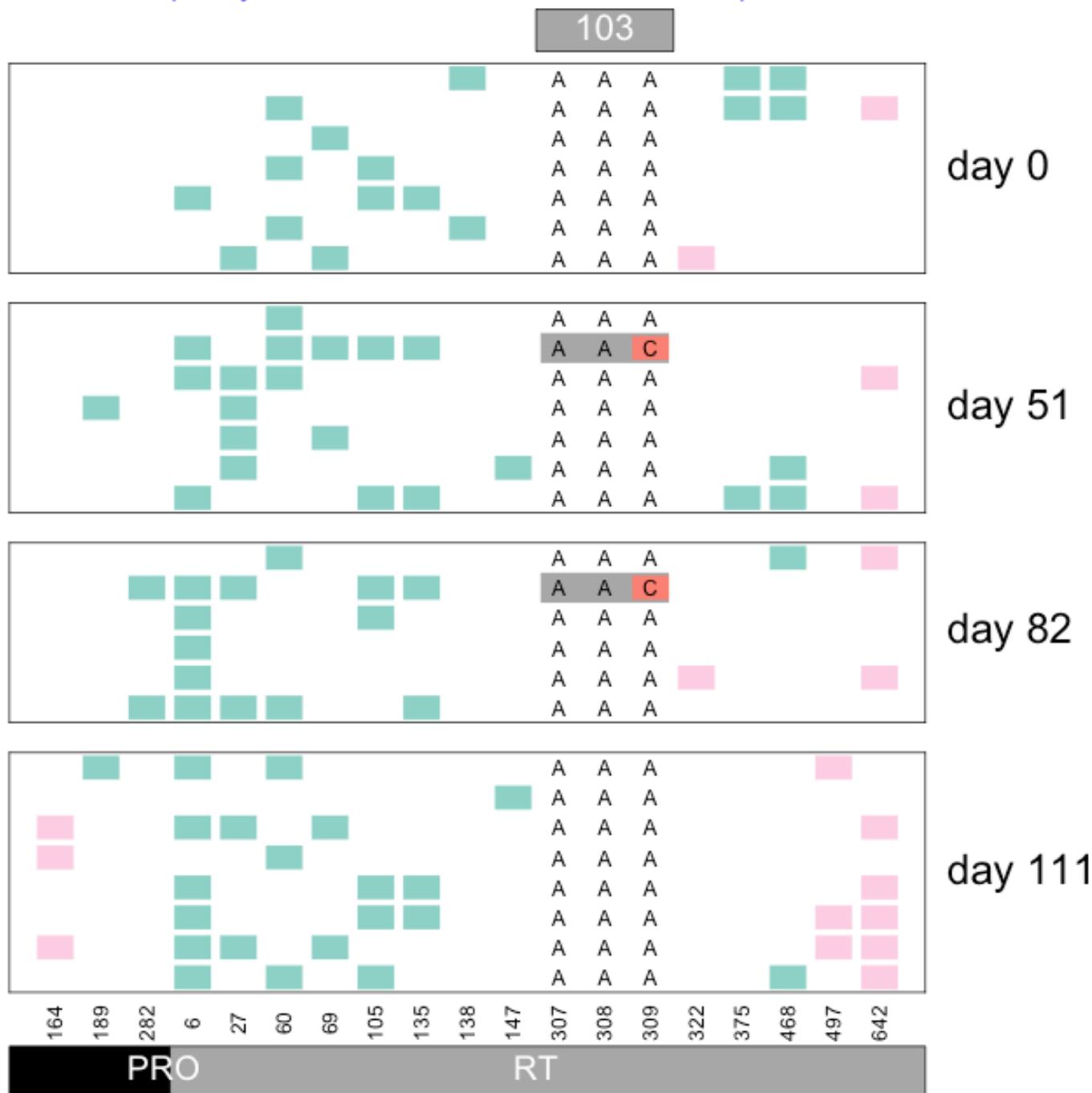
Viral sequences from patient 155

(likely treated with ZDV/3TC + efavirenz)



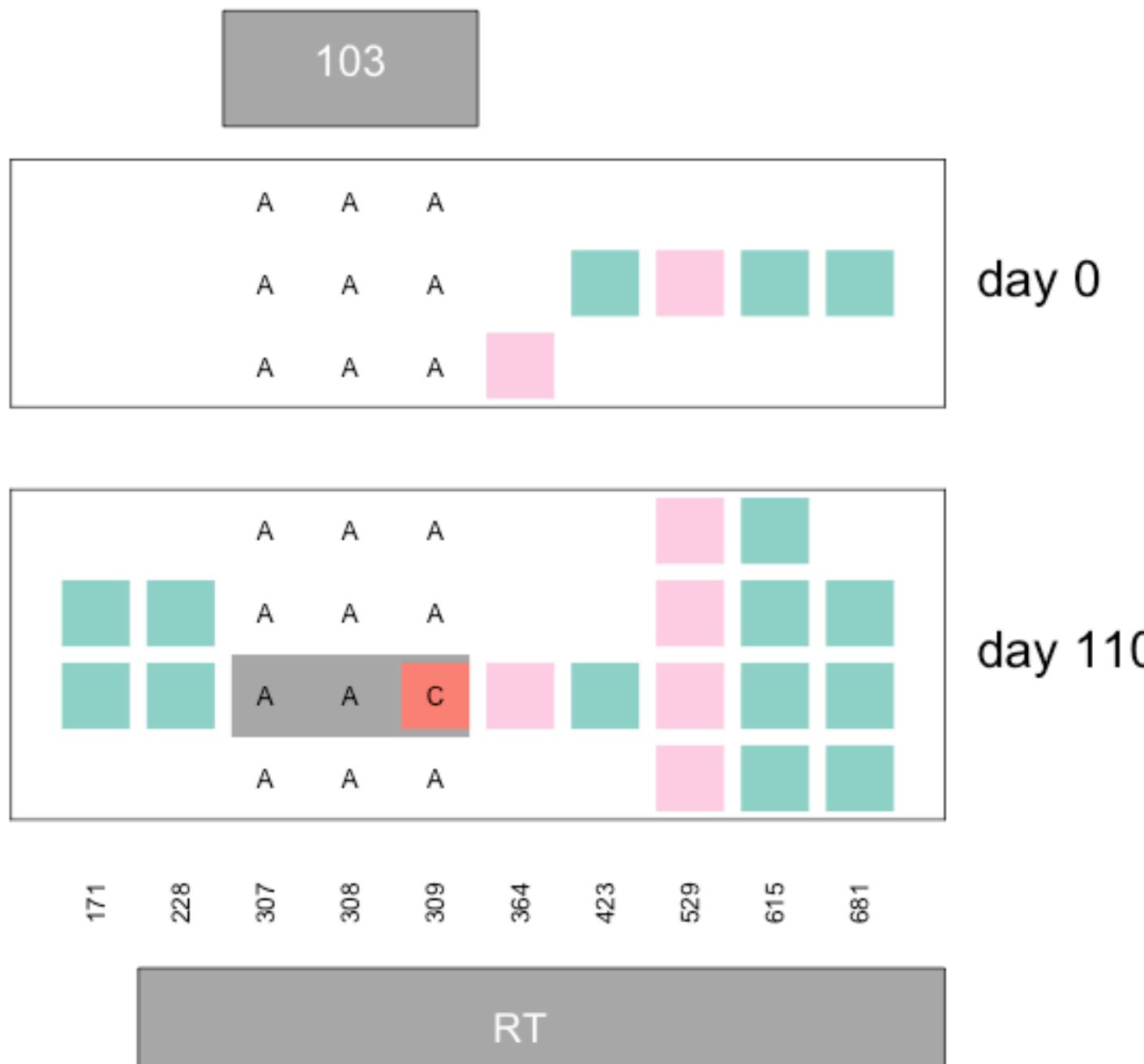
Viral sequences from patient 156

(likely treated with ZDV/3TC + efavirenz)



Viral sequences from patient 157

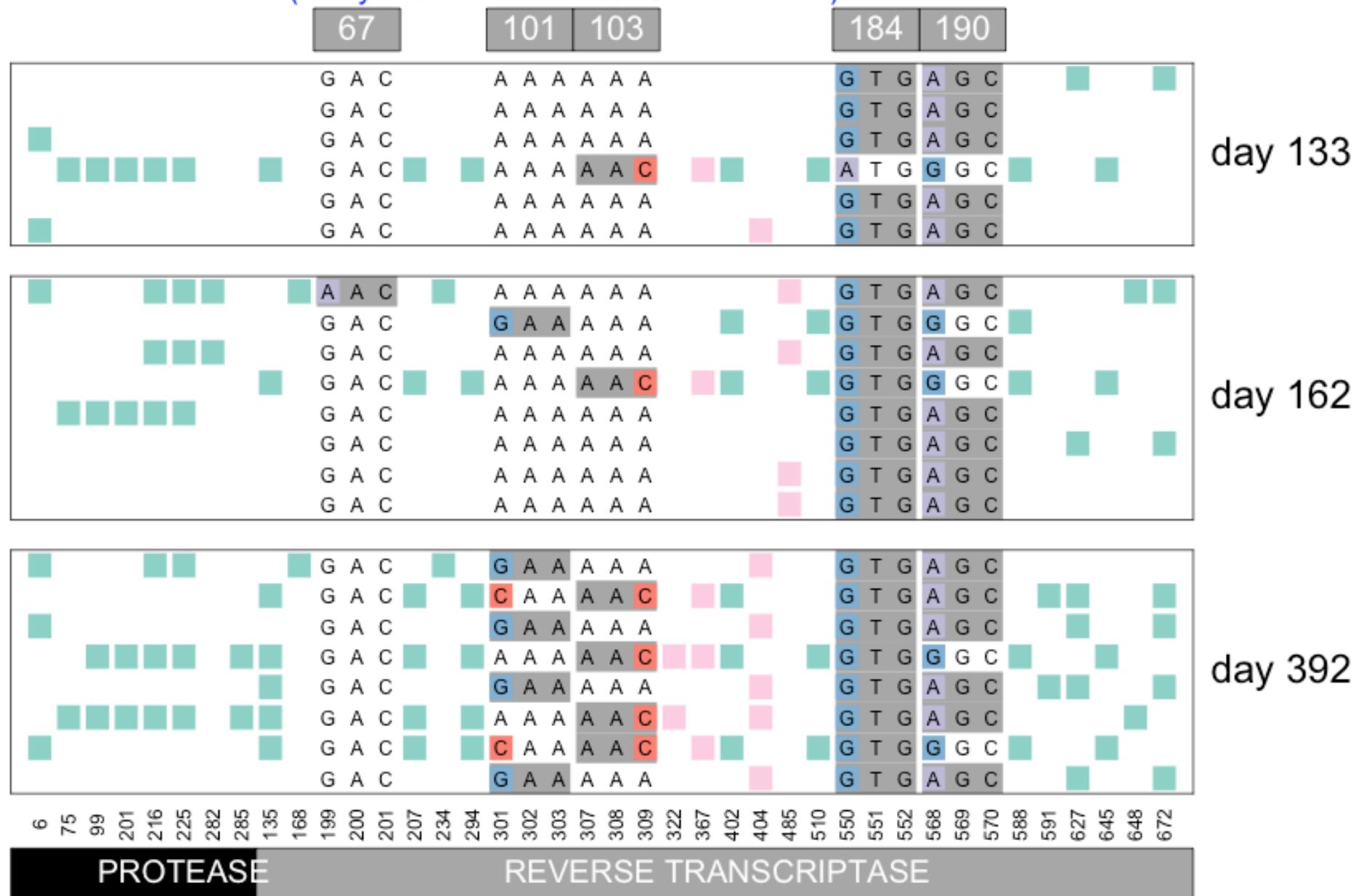
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 158

(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 159

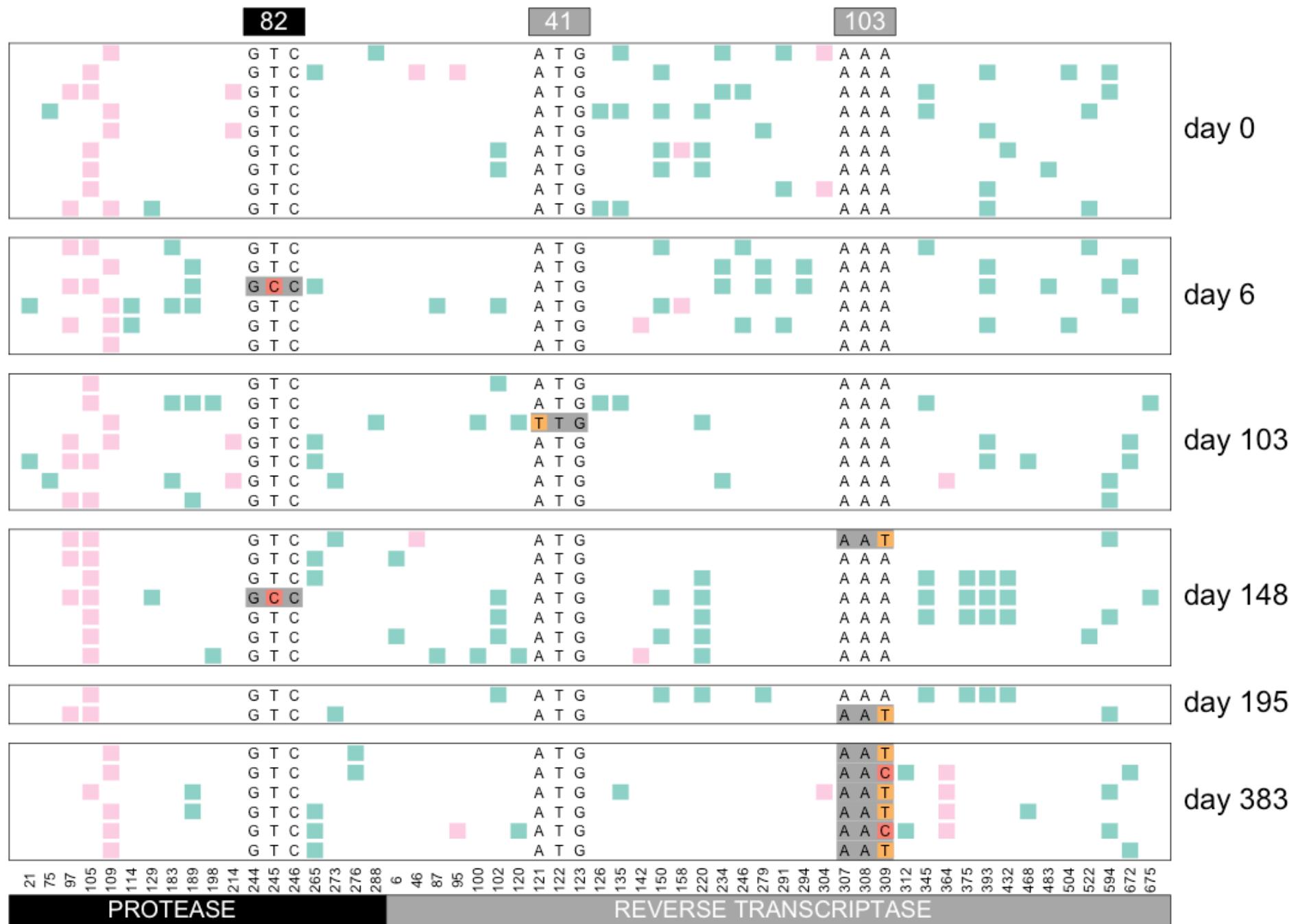
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

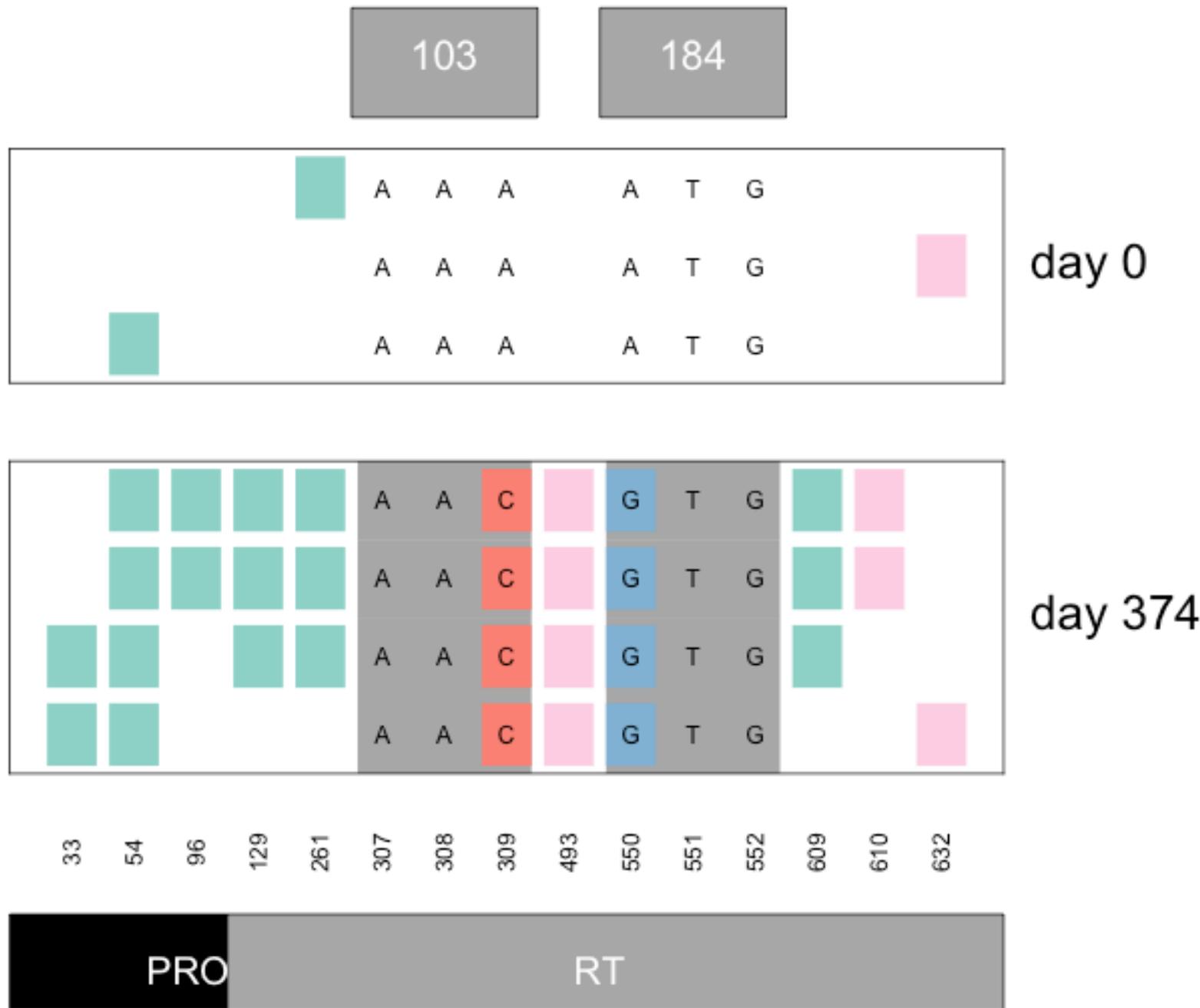
Viral sequences from patient 162

(likely treated with ZDV/3TC + efavirenz)



Viral sequences from patient 166

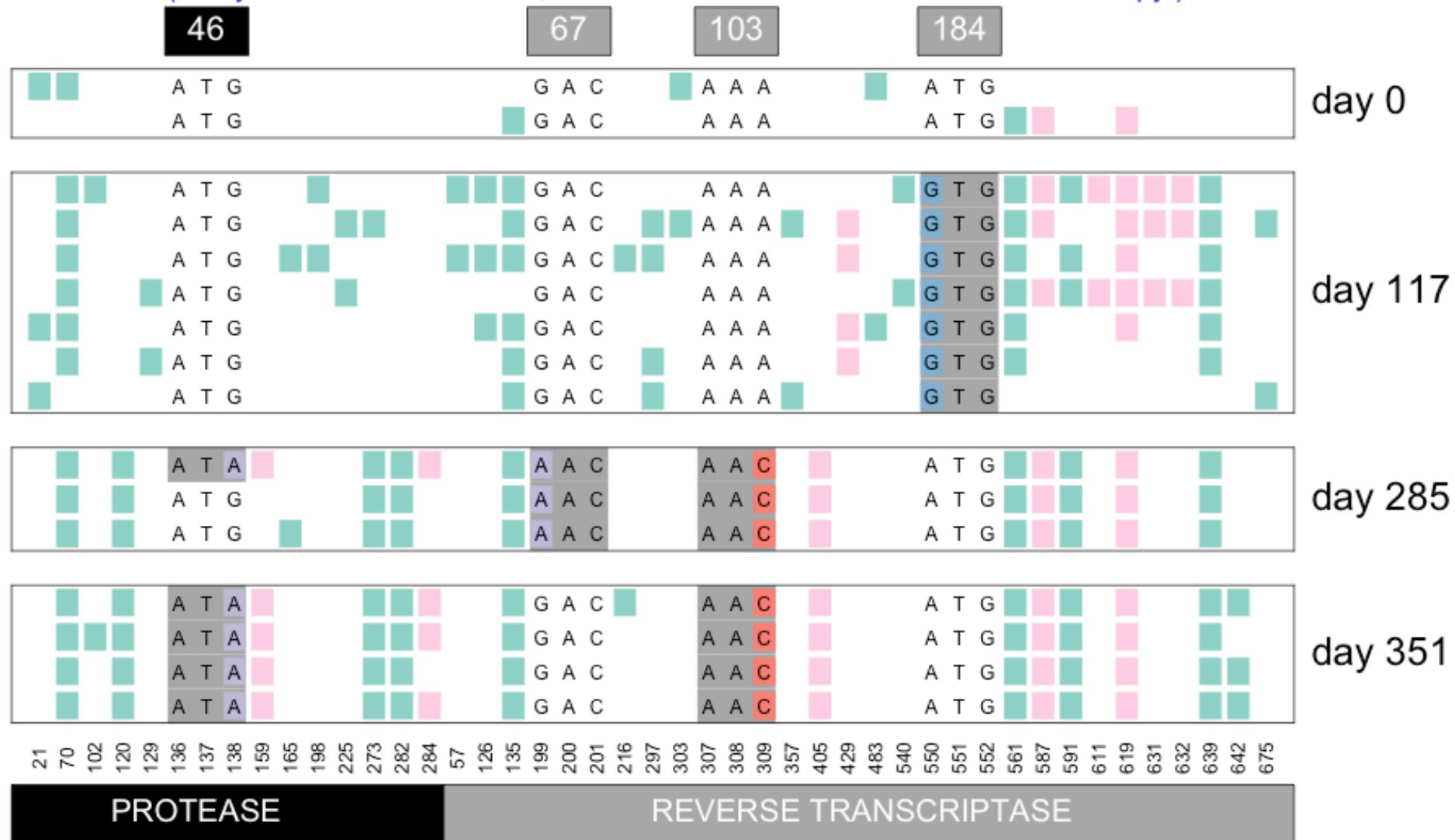
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 167

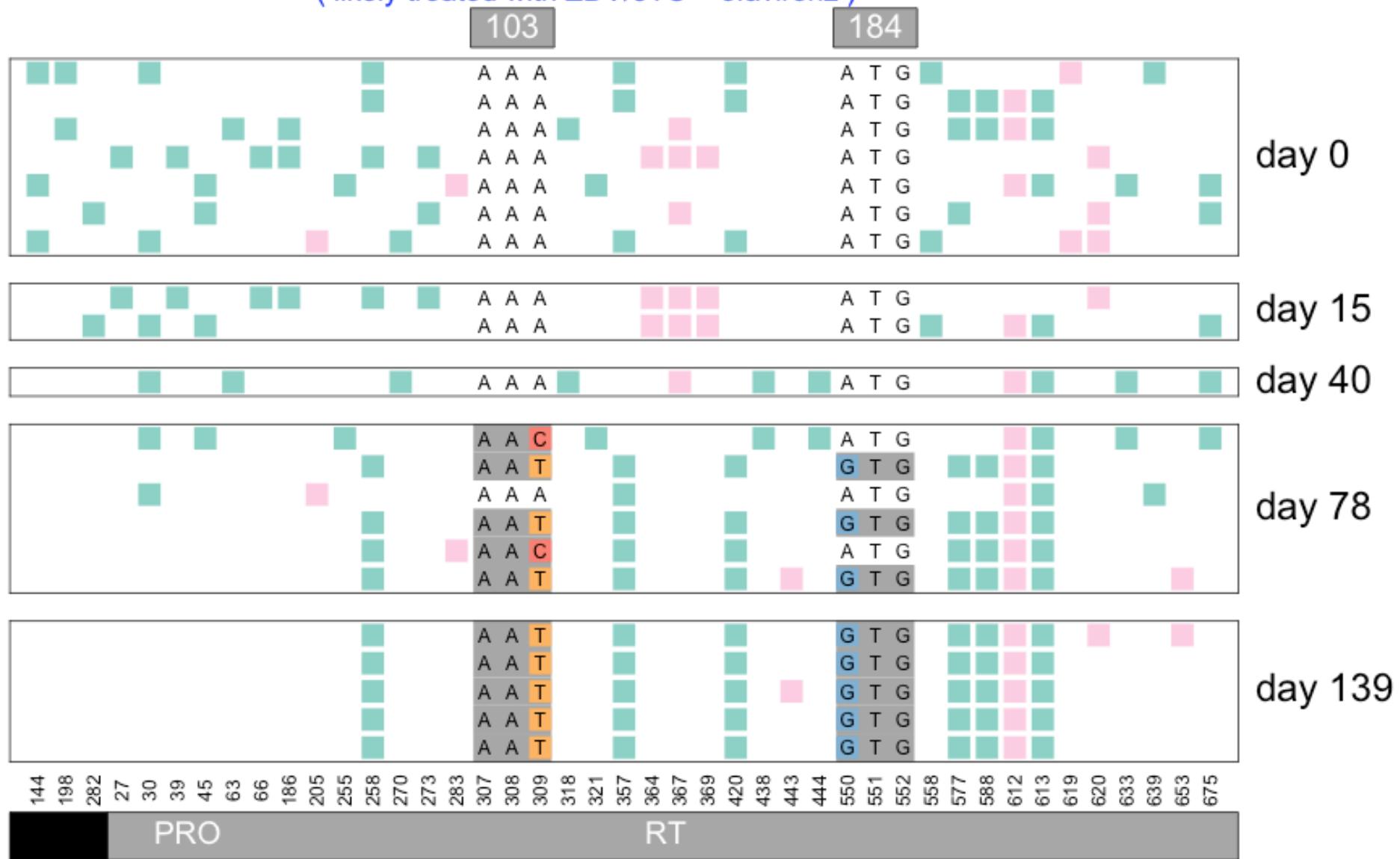
(likely treated with ZDV/3TC, later switched to efavirenz combination therapy)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 168

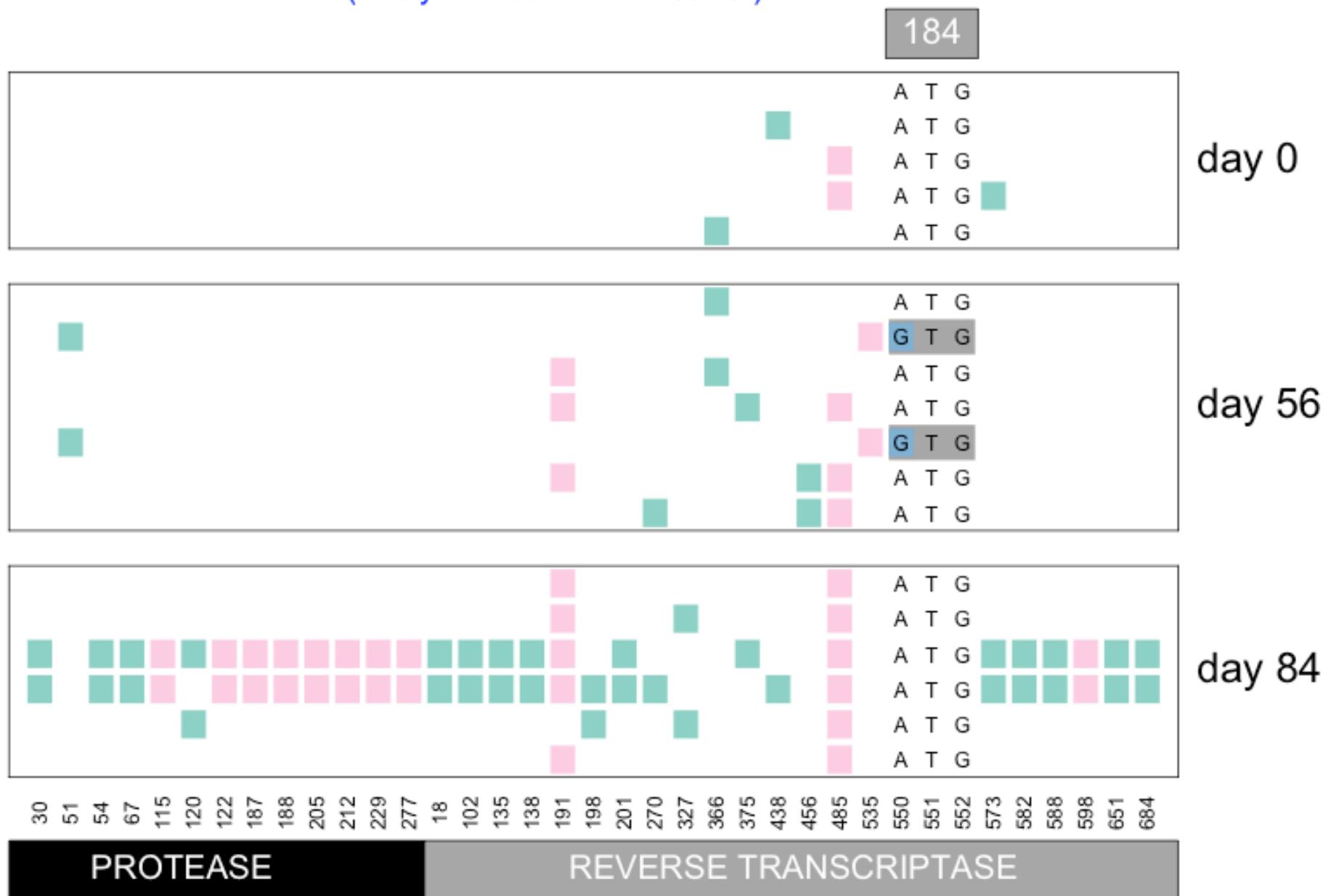
(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 169

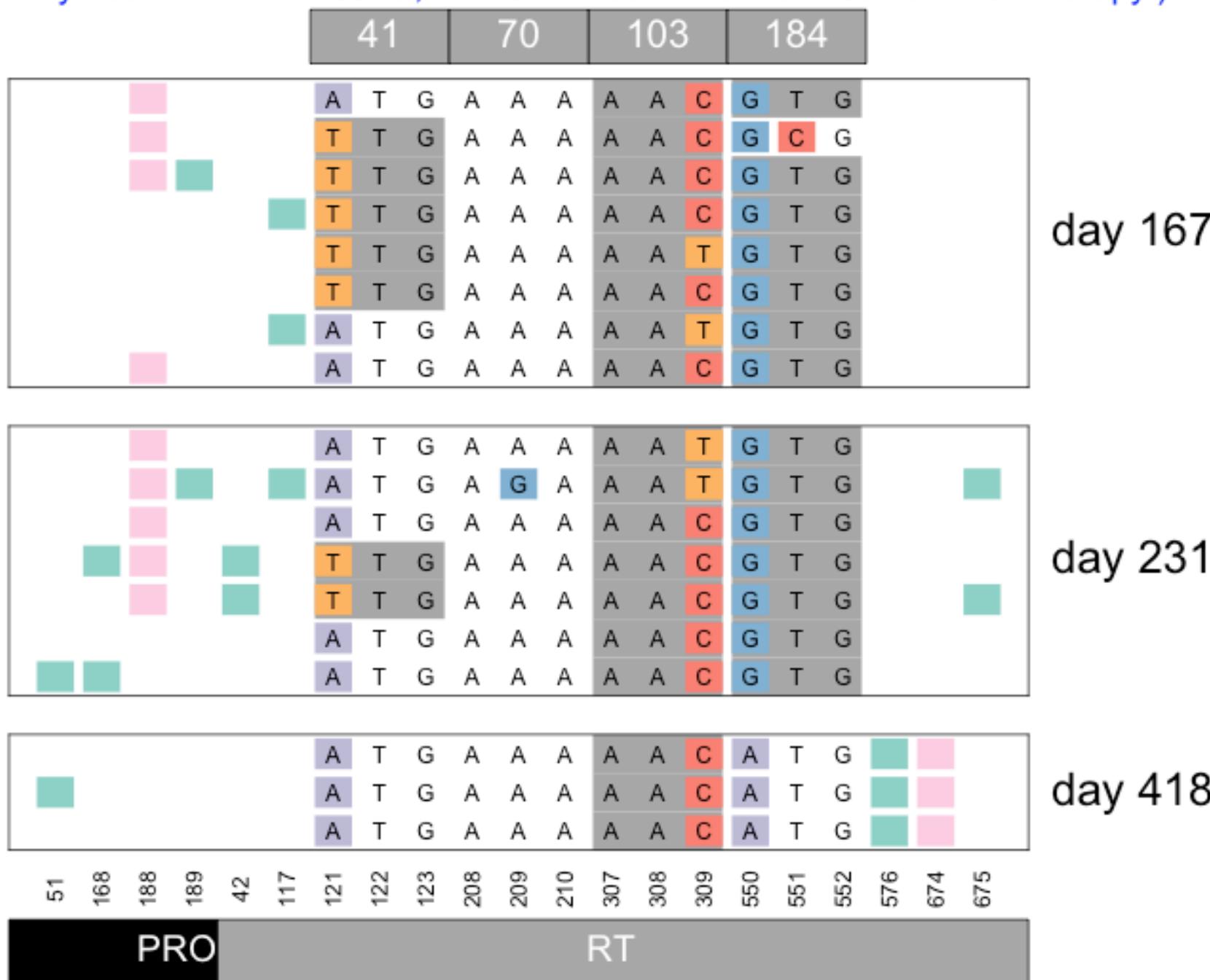
(likely treated with ZDV/3TC)



Williams, Pennings, 2018. Data from Bacheler et al 2000

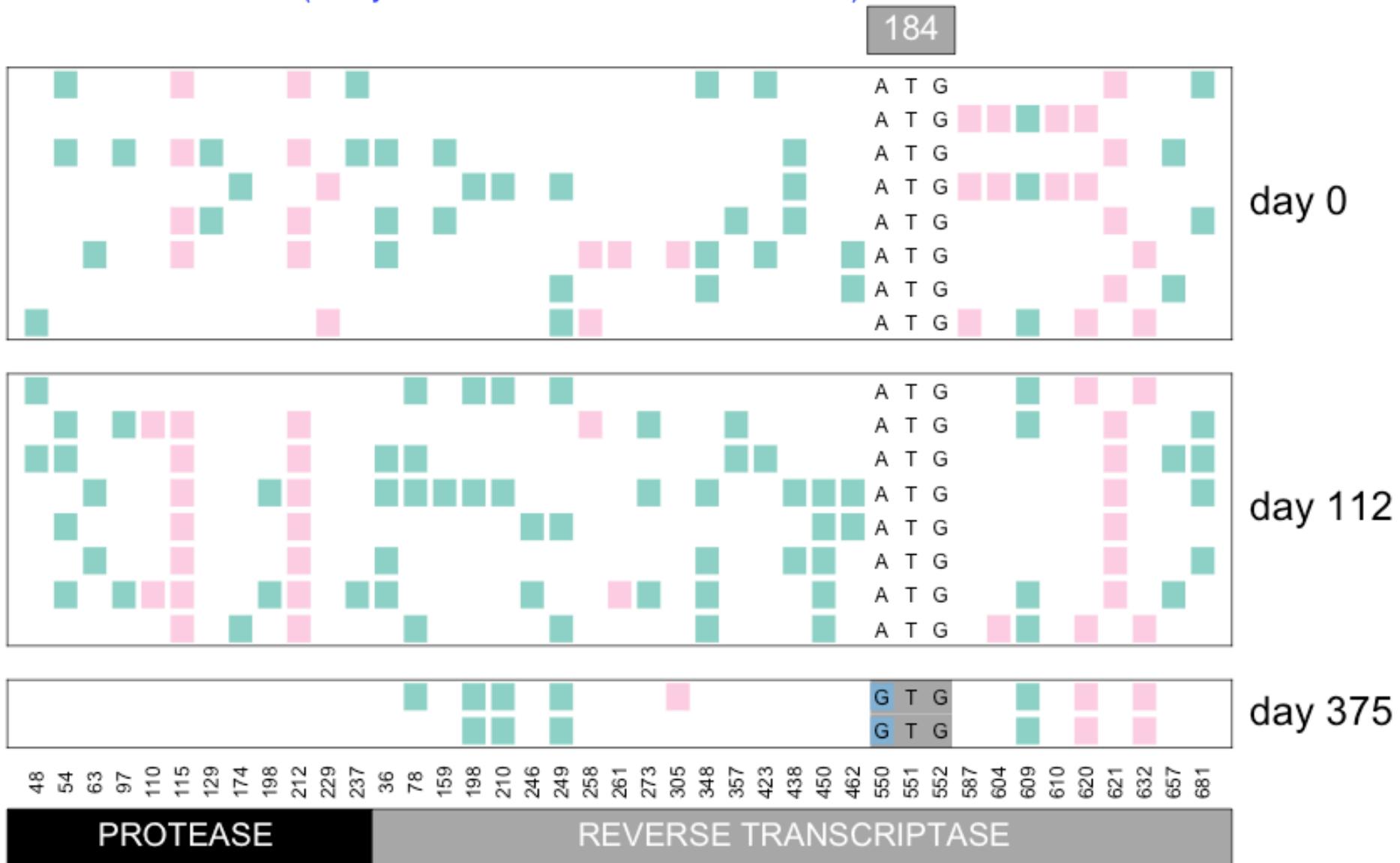
Viral sequences from patient 170

(likely treated with ZDV/3TC, later switched to efavirenz combination therapy)



Viral sequences from patient 171

(likely treated with ZDV/3TC + efavirenz)



Williams, Pennings, 2018. Data from Bacheler et al 2000

Viral sequences from patient 172

(likely treated with ZDV/3TC + efavirenz)

